DENON

BLU-RAY DISC / DVD VIDEO PLAYER

DVD-3800BDCI

OPERATING INSTRUCTIONS
MODE D'EMPLOI
INSTRUCCIONES DE FUNCIONAMIENTO

Safety Precautions



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Laser Safety

CAUTION:

VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM.

LOCATION: INSIDE, NEAR THE DECK MECHANISM.

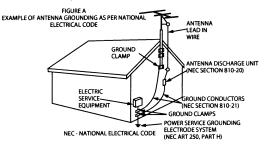
CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

THIS PRODUCT SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

SAFETY INSTRUCTIONS

- Read Instructions All the safety and operating instructions should be read before the product is operated.
- Retain Instructions The safety and operating instructions should be retained for future reference.
- Heed Warnings All warnings on the product and in the operating instructions should be adhered to.
- 4. Follow Instructions All operating and use instructions should be followed.
- Cleaning Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.
- Attachments Do not use attachments not recommended by the product manufacturer as they may cause hazards.
- Water and Moisture Do not use this product near water for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
- 8. Accessories Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
- A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.
- 10. Ventilation Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- Power Sources This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
- 12. Grounding or Polarization This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.



- 13. Power-Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
- 14. Outdoor Antenna Grounding If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.
- Lightning For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and powerline surges.
- 16. Power lines An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
- Overloading Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
- Object and Liquid Entry Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- Servicing Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- Damage Requiring Service Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a) When the power-supply cord or plug is damaged.
 - b) If liquid has been spilled, or objects have fallen into the product.
 - c) If the product has been exposed to rain or water.
 - d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - e) If the product has been dropped or damaged in any way.
 - f) When the product exhibits a distinct change in performance this indicates a need for service.
- Replacement Parts When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- Safety Check Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- Wall or Ceiling Mounting The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
- Heat The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

PANOL TRAINÇA

Introduction

FCC INFORMATION (For US customers)

1. PRODUCT

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

2. IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by DENON may void your authority, granted by the FCC, to use the product.

3. NOTE

This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the product into an outlet on a circuit different from that to which the receiver is connected.
- Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAUTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG
TO WIDE SLOT, FULLY INSERT.

ATTENTION:

POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LAFICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

■ Copyrights / Droits d'auteur / Derechos de Autor

- It is prohibited by law to reproduce, broadcast, rent or play discs in public without the consent of the copyright holder.
- La reproduction, la diffusion, la location, le prêt ou la lecture publique de ces disques sont interdits sans le consentement du détenteur des droits d'auteur.
- De acuerdo con las leyes está prohibido reproducir, emitir, alquilar o interpretar discos en público sin la autorización del propietario de los derechos de autor.

■ Note on use / Observations relatives a l'utilisation / Notas sobre el uso



- Avoid high temperatures.
 Allow for sufficient heat dispersion when installed in a rack.
- Eviter des températures élevées
 Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.
- Evite altas temperaturas
 Permite la suficiente dispersión del calor cuando está instalado en la consola.



- Keep the apparatus free from moisture, water, and dust.
- Protéger l'appareil contre l'humidité, l'eau et lapoussière.
- Mantenga el equipo libre de humedad, agua y polvo.



- Do not let foreign objects into the apparatus.
- Ne pas laisser des objets étrangers dans l'appareil.
- No deje objetos extraños dentro del equipo.



- Unplug the power cord when not using the apparatus for long periods of time.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.
- Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.



- Do not let insecticides, benzene, and thinner come in contact with the apparatus.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.
- No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.



- Handle the power cord carefully.

 Hold the plug when unplugging the cord.
- Manipuler le cordon d'alimentation avec précaution.
 Tenir la prise lors du débranchement du cordon.
- Maneje el cordón de energía con cuidado.
 Sostenga el enchufe cuando desconecte el cordón de energía.



- * (For apparatuses with ventilation holes)
- Do not obstruct the ventilation holes.
- Ne pas obstruer les trous d'aération.
- No obstruya los orificios de ventilación.



- Never disassemble or modify the apparatus in any
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.
- Nunca desarme o modifique el equipo de ninguna manera.



Introduction Contents

Introduction	
Features	1
Advanced AL24 Processing	2
Important	2
Power Supply	2
Warning	2
Installation Location	2
Cautions on Installation	
Caution on Handling	
Dew Warning	3
Avoid the Hazards of Electrical Shock and Fire	
Before Using	3
About Copyright	3
Supplied Accessories	3
Trademark Information	
About Discs	4
Disc Handling	4
Cleaning Discs	4
Playable Discs and Files	4
Unplayable Discs	5
Color Systems	5
Region Codes	
Structure of Disc/SD Memory Card Contents	5
Symbols Used in this Operating Instructions	
About the Remote Control	6
Loading the Batteries	
Using a Remote Control	
Setting this Unit not React to Other DENON's DVD Player's	
Remote Control	6
Changing the Signal Code of a Remote Control	6
Part Names and Functions	7
Front Panel	7
Rear Panel	
Remote Control	
Front Panel Display	
Adjusting the Brightness of the Display	9
Examples of Displays during Operation	g
Examples of Displays during operation imminimum.	-
<u>Connections</u>	
Connecting to a TV	o
Connecting to a Display Device with HDMI Cable10	O
Connecting to a Display Device and an Amplifier/	_
Receiver with HDMI Cable10	0
HDMI Output Mode and Actual Output Signals	1
Audio Setting1	1
Digital Connection to an AV Amplifier with	•
Built-in Decoder12	2
Duit-III Decouel	_

Connection to a Device with 2-channels of Analog Audio Inputs	13
Surround Connections to a Device with 7.1/	
5.1-channels of Analog Audio Inputs	13
Connecting the AC cord	13
Playback Turning the Power On Direct Playback	14
Operations Using Disc Menu, Title Menu, and	
Popup Menu	15
Playing Back a VR mode DVD-RW/-R	15
Pause	
Resume Playback	16
Fast Forward / Fast Reverse Playback	16
Slow Forward PlaybackStep by Step Playback	10
Dialog Speed	
Repeat Playback	
A-B Repeat	
Program Playback	18
Random Playback	
Zoom	
Camera Angle	
Search	
On-Screen DisplaySelecting the Format of Audio and Video	20
Selecting Audio Streams/Channels	
Selecting Subtitle Language	
Virtual Surround	
Pure Direct Mode	
Setting the BD Audio Mode	
Adjusting the Picture	24
Playing Back an MP3, Windows Media™ Audio, JPEG and DivX° File	25
Kodak Picture CD	
Reading the SD Memory Card	27
nedanig tile op intilier, telle illinensis	
Function Setup	
Using the Setup Menu	
Quick	
Custom	
Initialize	37
Others	
Troubleshooting	38
Language Code	39
Specifications	

Features

HDMI (High-Definition Multimedia Interface)

You can enjoy clearer video output when connecting this unit to a display device with an HDMI-compatible port.

Dialog Speed

Playback in slightly faster speed while keeping the sound output.

Dialog speed is available only on discs recorded in the Dolby Digital format.

●Still/Fast/Slow/Step Playback

Various playback modes are available including still pictures, fast forward/reverse, slow motion and step frames.

●Still Mode

The resolution of pictures while in the still (pause) mode can be adjusted.

Random Playback for audio CD, MP3, JPEG, and Windows Media™ Audio

This unit can shuffle the playback order of tracks/files.

Program Playback for audio CD, MP3, JPEG, and Windows Media™ Audio

You can program the playback order of tracks/files in a desired order.

●BD/DVD Menus in a Desired Language

You can display BD/DVD menus in a desired language, if available on a BD/DVD.

Auto Power Off

The power turns off automatically if there is no activity at the unit or its remote control for more than 30 minutes (refer to page 37).

•Subtitles in a Desired Language

You can select a desired language for subtitles if that language is available on the BD/DVD and DivX®.

• Selecting a Camera Angle

You can select a desired camera angle if a disc contains sequences recorded from different angles.

•Choices for Audio Language and Sound Mode

You can select a desired audio language and sound mode if different languages and modes are available on a disc.

• Ratings Control (Parental Lock)

You can set the control level to limit playback of discs which may not be suitable for children.

Automatic Detection of Discs

This unit automatically detects if a loaded disc is BD, DVD, audio CD, MP3, JPEG, Windows Media™ Audio or DivX®.

Pure Direct

The sound quality of analog audio output is improved by stop output of video signals, etc.

On-Screen Display

Information about the current operation can be displayed on a screen, allowing you to confirm the currently active functions (such as program playback) using the remote control.

Dimmer

The brightness of the front panel display can be adjusted.

Screen Saver

The screen saver program starts if there is no activity at the unit or its remote for more than 5 minutes. The brightness of the display is darken by 75%. The program is deactivated when there is any activity.

Picture Control

Picture control adjusts black level and noise reduction of the specific display.

Search

Chapter search: Search for a desired chapter.
Title search: Search for a desired title.
Track search: Search for a desired track/file.

Time search: Search for a desired time point or a title or a

track/file.

Repeat

Chapter: Repeated playback of a chapter of the disc.
Title: Repeated playback of a title of the disc.
Track: Repeated playback of a track/file of the disc.
All: Repeated playback of the entire disc.
(not available for BD, DVD-video)

A-B: Repeated playback of a part between two points.
Group: Repeated playback of a folder of the MP3/JPEG/

Windows Media™ Audio/DivX® disc being played

back is possible.

Zoom

x1.2, x1.5, x2.0, x4.0 magnified image can be displayed. (not available for BD)

Marker

Electric reference points designated by user can be called back.

Resume Playback

User can resume playback from the point at which the playback has been stopped even if the power is turned off.

Bit Rate Indication

The bit rate (the amount of video data currently being read) can be displayed during the playback of video contents. (not available for BD)

•DRC (Dynamic Range Control)

Use this procedure to set the dynamic range of the output signals when playing back DVD/BD recorded in Dolby Digital/Dolby Digital Plus/Dolby TrueHD.

Displaying a JPEG picture

Kodak Picture CD can be played back. Still images stored in JPEG format on DVD-RW/-R, CD-RW/-R or SD Memory Card can also be played back.

◆Playing Back Windows Media™ Audio File

You can enjoy Windows Media™ Audio files which are recorded on DVD-RW/-R, CD-RW/-R or SD Memory Card.

Playing Back an MP3 File

You can enjoy MP3 files which are recorded on DVD-RW/-R, CD-RW/-R or SD Memory Card.

● Playing Back DivX® File

You can enjoy DivX® files which are recorded on DVD-RW/-R or CD-RW/-R.

- Official DivX® Certified product
- Plays all versions of DivX[®] video (including DivX[®] 6) with standard playback of DivX[®] media files.

Playing Back the Contents in SD Memory Card

- You can playback MP3, Windows Media[™] Audio, or JPEG stored in an SD Memory Card.
- You can store picture-in-picture commentary, subtitles or other extras for BD-ROM Profile 1.1 files in an SD Memory Card and playback with the BD-ROM.

BD-J Application

• With some BD that supports Java applications (BD-J), you can enjoy interactive function (e.g., game).

Analog 7.1ch Surround Output

This player is equipped with analog 7.1-channel surround audio out jacks for playback.

Advanced AL24 Processing

"Advanced AL24 Processing" which greatly increases the amount of information in the time axis area using unique high speed signal detection and processing technology for the PCM signal BD/DVD/CD playback circuitry is provided for 2-channel output. In addition to expansion of data to 24 bits, natural signal correction without marring the original data is performed with upconversion sampling.

In addition, DENON's original analog waveform reproduction technology, "AL24 Processing PLUS", is used for the 7.1-channel audio output, resulting in high sound quality for all PCM signal sources.

The "Advanced AL24" indicator lights on the front panel when Advanced AL24 Processing is activated.

Important

Use only discs marked with logos listed on page 4.

Power Supply

The main power supply is engaged when the main plug is plugged in a 120V, 60Hz AC outlet. To operate the unit, press <— ON / _ OFF> to turn on the unit.

Introduction

Warning

To avoid fire or electric shock, do not expose this unit to rain or moisture.

WARNING:

LIVE PARTS INSIDE.

DO NOT REMOVE ANY SCREWS.

Installation Location

For safety and optimum performance of this unit:

- Do not stand the unit up vertically. Install the unit in a horizontal and stable position. Do not place anything directly on top of the unit. Do not place the unit directly on top of the TV.
- Shield it from direct sunlight and keep it away from sources of intense heat. Avoid dusty or humid places. Avoid places with insufficient ventilation for proper heat dissipation. Do not block the ventilation holes on the sides of the unit. Avoid locations subject to strong vibration or strong magnetic fields.
- Be sure to remove a disc and unplug the AC cord from the outlet before carrying the unit.

Non-use periods - Turn off the unit when it is not in use. Unplug the unit from the household AC outlet if it is not to be used for a long time. Unplug the unit during lightning storms.

Please read this operating instructions carefully before using the unit, and keep it for future reference.

Cautions on Installation

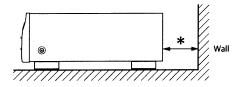
Noise or disturbance of the picture may be generated if this unit or any other electronic equipment using microprocessors is used near a tuner or TV.

If this happens, take the following steps:

- Install this unit as far as possible from the tuner or TV.
- Set the antenna wires from the tuner or TV away from this unit's AC cord and input/output connection cords.
- Noise or disturbance tends to occur particularly when using indoor antennas or 300Ω /ohms feeder wires. We recommend using outdoor antennas and 75Ω /ohms coaxial cables.

Note

 For heat dispersal, do not install this equipment in a confined space such as a book case or similar unit.



Caution on Handling

Cautions on using mobile phones.

Using a mobile phone near this unit may result in noise. If so, move the mobile phone away from this unit when it is in use.

Before turning the power operation button on.
 Check once again that all connections are correct and that there

are not problems with the connection cables. Always set the power operation button to the standby position before connecting and disconnecting connection cables.

• Sufficiently ventilate the place of installation.

If the unit is left in a room full of the smoke from cigarettes, etc., for long periods of time, the surface of the optical pickup could get dirty, in which case it will not be able to read the signals properly.

Dew Warning

Moisture condensation may occur inside the unit when it is moved from a cold place to a warm place, or after heating a cold room or under conditions of high humidity. Do not use the unit at least for 2 hours until its inside is dry.

Avoid the Hazards of Electrical Shock and Fire

- Do not handle the AC cord with wet hands.
- Do not pull on the AC cord when disconnecting it from AC wall outlet. Grasp it by the plug.
- If, by accident, water is spilled on this unit, unplug the AC cord immediately and take the unit to our authorized service center for servicing.

Before Using

Pay attention to the following before using this unit:

Moving the unit.

To prevent short-circuits or damaged wires in the connection cables, always unplug the power supply cord and disconnect the connection cables between all other audio components when moving the unit.

• Store the operating instructions in a safe place.

After reading the operating instructions, store them in a safe

After reading the operating instructions, store them in a safe place as they could come in handy in the future.

•Whenever <ON/STANDBY> is in the STANDBY state, the unit is still connected to AC line voltage.

Please be sure to press < ON / OFF> to turn off the power or unplug the cord when you leave home for, say, a vacation.

 Note that the illustrations in these instructions may differ from the actual unit for explanation purposes.

The serial number of this product may be found on the back of the unit. No others have the same serial number as yours. You should record the number and other vital information here and retain this book as a permanent record of your purchase to aid identification in case of theft.

Date of Purchase	
Dealer Purchase from	
Dealer Address	
Dealer Phone No.	
Model No.	
Serial No.	

About Copyright

Unauthorized copying, broadcasting, public performance and lending of discs are prohibited.

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

U. S. Patent No's, 4,631,603; 4,819,098; 4,907,093; 5,315,448 and 6,516,132.

Supplied Accessories

Please check to make sure the following items are included with the main unit in the carton.

remote control (RC-1090)

"AA" (R6P) batteries x2

AC cord operating instructions

service station list warranty card

RCA audio cable

RCA video cable

Trademark Information



HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

DIDOLBY DIGITAL PLUS

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.



Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS and DTS Digital Surround are registered trademarks and the DTS logos and Symbol are trademarks of DTS, Inc. © 1996-2007 DTS, Inc. All Rights Reserved.

Introduction



Java and all other trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and/or other countries.



DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.



Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

"Blu-ray Disc" and _____ are trademarks.

is a trademark of DVD Format/Logo Licensing Corporation.



Return CD | is trademark of Eastman Kodak Company.

About Discs

Disc Handling

- Handle the discs so that fingerprints and dust do not adhere to the surfaces of the discs.
- Always store the disc in its protective case when it is not used.
- Note that discs with special shapes cannot be played on this product. Do not attempt to play back such discs, as they may damage the unit.

Cleaning Discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center to out. Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, detergent, abrasive cleaning agents or antistatic spray intended for analog records.

Playable Discs and Files

(Unclosed discs may not be played back.)

This unit is compatible to play back the following discs. To play back a BD or DVD, make sure that it meets the requirements

for region codes and color systems as described on page 5. You can play back discs that have the following logos on the disc. Other disc types are not guaranteed to play back.

Plavable discs Logos Blu-ray Disc - BD-video - BD-RE (ver.2.1) (Recorded in BDMV format) - BD-R (Recorded in BDMV format)

DVD-video **DVD-RW** (Finalized discs only) DVD-R (Finalized discs only) DVD-R DL

CD-DA (audio CD)



CD-RW





disc

CD-R





DTS - CD (5.1 Music Disc)

Kodak Picture CD

Playable files	Logos	Media
MP3		DVD-RW/-R

Windows Media™ Audio

CD-RW/-R SD Memory Card (including SDHC) miniSD Card microSD Card

Media

DivX®

JPEG



DVD-RW/-R CD-RW/-R

Note

- Discs containing the DivX® files with the DivX® GMC (Global Motion Compensation) playback feature, which is DivX® supplemental function, cannot be played back on this unit.
- This unit cannot play back the disc contents protected by Windows Media Digital Rights Management (DRM).
- "WMA" (Windows Media™ Audio) is an audio codec developed by Microsoft* in the United States of America.
- This unit supports AAC as an audio format recorded with video contents for BD-R, BD-RE. This unit does not support AAC as an independent audio file.

Readable cards	Playable files / data
SD Memory Card (8MB - 2GB)	MP3, Windows Media™ Audio,
SDHC Memory Card (4GB)	_ JPEG, Picture-in-picture commentary, subtitles or other
miniSD Card (8MB - 2GB)	
microSD Card (8MB - 2GB)	extras for BD-ROM Profile 1.1

Note for SD Memory Cards

- Do not remove the SD Memory Card or turn off the unit while the contents of the card is in playback. It may result in malfunction or loss of the card's data.
- Please keep the SD Memory Cards in their cases when you are not using them.
- Do not try to open or modify the card.
- Do not touch the terminal surface with your fingers or any metals.
- Do not attach additional labels or stickers to cards.
- Do not remove the label of the SD Memory Cards.
- This unit supports SD Memory Card with FAT12/FAT16 file system, and SDHC Memory Card with FAT32 file system.
- This unit may not read the SD Memory Cards formatted on computer. If that is the case, please reformat the SD Memory Cards on this unit and try again.
- This unit does not supports mini SDHC and micro SDHC Memory Card.
- For miniSD Card and microSD Card adapter is necessary.



Portions of this product are protected under copyright law and are provided under license by ARIS/SOLANA/4C.

ENGLISH

Introduction

Unplayable Discs

The following discs will not play back on this unit.

- BD-RE Ver.1.0 (BD-disc with cartridge)
- BD contains MP3/ Windows Media[™] Audio/ JPEG/ DivX[®] files
- BD/DVD hybrid disc (e.g., Total Hi Def hybrid disc)
- BD-video that does not include "A" on its region code.
- DVD-video that does not include either "1" nor "ALL" on its region code.
- DVD-ROM/RAM (For DVD-ROM discs, data files in DivX® 3.11, 4.x, 5.x and 6 can be played)
- DVD-RW/-R recorded in non-compatible recording format
- CD-ROM (Data files in DivX® 3.11, 4.x, 5.x and 6 can be played)
- CDV (Only the audio part can be played)
- CD-G (Only the audio signals can be output)
- CompactDisc-Interactive (CD-I)
- Video Single Disc (VSD)
- Video CD, Super Video CD
- Super audio CD (Only the sound on the CD layer can be heard. The sound on the high-density super audio CD layer cannot be heard.)
- DVD-audio
- HD DVD
- · Disc with recording area less than 55mm in diameter
- Unauthorized disc (Pirated disc)
- Unfinalized disc

Color Systems

BD and DVD are recorded in different color systems throughout the world. The most common color system is NTSC (which is used primarily in the United States and Canada).

This unit uses NTSC, so BD or DVD you play back must be recorded in the NTSC system. You cannot play back BD or DVD recorded in other color systems.

Region Codes

This unit has been designed to play back BD with region A and DVD-video with region 1. You cannot play back BD or DVD-video that are labeled for other regions. Look for the symbols on the right on your BD or DVD-video. If these region symbols do not appear on your BD or DVD-video, you cannot play back the disc in this unit. The letter or number inside the globe refers to region of the world. A BD or DVD-video labeled for a specific region can only play back on the unit with the same region code.

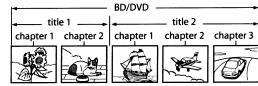






Structure of Disc/SD Memory Card Contents

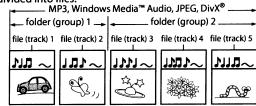
The contents of BD / DVD are generally divided into titles. Titles may be further subdivided into chapters.



Audio CDs are divided into tracks.



Data discs or SD Memory Cards contains MP3/Windows Media™ Audio/JPEG/DivX® is divided into folders, and the folders are subdivided into files.



5 **ENGLISH**

Symbols Used in this Operating Instructions

To specify for which media type each function is, we put the following symbols at the beginning of each item to operate.

Symbol	Description
BD-V	Description refers to BD-video and BD-RE (ver. 2.1)/ BD-R recorded in BDMV format
DVD-V	Description refers to DVD-video and DVD-RW/-R recorded in video mode
DVD-VR	Description refers to DVD-RW/-R recorded in VR mode
CD	Description refers to audio CD and DTS-CD
МР3	Description refers to DVD-RW/-R, CD-RW/-R and SD Memory Card with MP3 files
WMA	Description refers to DVD-RW/-R, CD-RW/-R and SD Memory Card with Windows Media™ Audio files
JPEG	Description refers to DVD-RW/-R, CD-RW/-R and SD Memory Card with JPEG files
DivX*	Description refers to DVD-RW/-R and CD-RW/-R with DivX® files

If you do not find any of the symbols listed above under the function heading, the operation is applicable to all media.

About the button names in this explanation

- <>: Buttons on the main unit
- []: Buttons on the remote control

Button name only:

Buttons on the main unit and remote control

About the Remote Control

Loading the Batteries

① Open the battery compartment cover.



(3) Close the cover.

(2) Insert two "AA" (R6P) batteries, with each one oriented correctly.



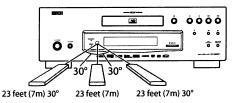
Cautions on Batteries

- · Use "AA" (R6P) batteries in this remote control.
- Replace the batteries with new ones approximately once a year, though this depends on the frequency with which the remote control is used.
- If the remote control does not operate within a close proximity of the main unit, replace the batteries with new ones, even if less than a year has passed.
- The included batteries serve only for verifying operation. Replace them with new batteries as soon as possible.
- When inserting the batteries, be careful to do so in the proper direction, following the ⊕ and ⊖ marks in the remote control's battery compartment.
- To prevent damage or battery fluid leakage:
- Do not mix a new battery with an old one.
- Do not mix two different types of batteries such as alkaline and manganese.
- Do not short-circuit, disassemble, heat or dispose of batteries in flames.
- Remove the batteries when not planning to use the remote control for a long period of time.
- If the batteries should leak, carefully wipe off the fluid from the inside of the battery compartment, then insert new batteries.

Using a Remote Control

Keep in mind the following when using the remote control:

- Make sure that there are no obstacles between the remote control and infrared sensor window on the unit.
- Remote operation may become unreliable if strong sunlight or fluorescent light is shining on infrared sensor window of the unit.
- Remote control for different devices can interfere with each other. Avoid using remote control for other equipment located close to the unit.
- Replace the batteries when you notice a fall off in the operating range of the remote control.
- The maximum operable ranges from the unit are as follows.
- Line of sight: approx. 23 feet (7m)
- Either side of the center: approx. 23 feet (7m) within 30°



Setting this Unit not React to Other DENON's DVD Player's Remote Control

If you have other DENON's DVD players around this unit, this unit reacts to the commands you made for DVD players through its remote control. To avoid this situation, you can set this unit not react to other DENON's DVD player's remote control.

- 1) In stop mode, press [SETUP].
- 2) Press [7],[8],[9],[2].
- 3) Press [SETUP].
 - "Only Attached Remocon" will be displayed on the upper right corner of the screen and this unit only react to the commands from this unit's remote control.
- To set back to default, press [7],[8],[9],[1] at step 2. "Normal Remocon" will be displayed on the upper right corner of the screen and this unit react to both the commands from this unit's remote control and the other DENON's DVD players' remote control.

Note

- The setting remains after you turn off this unit or unplug the AC cord.
- If you try to operate this unit with the other DENON's DVD players' remote control, some of the operation may not available depends on the manufactured year or type of the remote control.

Changing the Signal Code of a Remote Control

To avoid the other DENON's BD players responding the remote signal of this unit, you can change the signal code of the remote control. If the signal code of the remote control does not match to the signal code of the unit, you cannot control the unit with the remote control.

■ Change the signal code of the unit

- 1) In stop mode, press [SETUP].
- 2) Use [
 | to select then press [ENTER].
- 3) Use $[\triangleleft / \triangleright]$ to select other, then press [ENTER].
- 4) Use $[\triangle / \nabla]$ to select "Remote Control Setting".
- 5) Press [ENTER] to select "DENON1" or "DENON2".



6) Press [SETUP] to exit.

 At this point the new signal code of the unit is effective. Please change the signal code of the remote control to match to the signal code of the unit with following procedure.

■ Change the signal code of the remote control

Set to "DENON1":

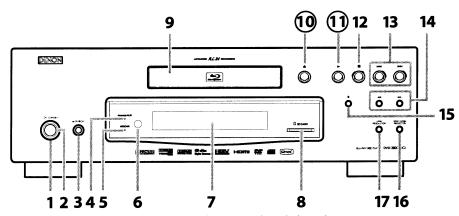
Press and hold [RETURN], and press [3], [2], [1]. Set to "DENON2":

Press and hold [RETURN], and press [1], [2], [3].

- If the signal code does not match, the signal code of the remote control will be displayed on the front panel display.
- The default setting and the setting after you change the batteries is "DENON1".

Part Names and Functions

Front Panel



The unit can also be turned on by pressing the buttons with circled numbers.

1. Power indicator

This indicator lights up in green when the power is on, and lights up in red when in standby mode.

2. ON/STANDBY button

Press to turn the unit to standby mode. In standby mode, this unit still consume small amount of power.

3. _ON / _OFF (POWER) switch

Press to turn the unit on and off. If you turn off the unit using this switch, the unit does not consume power. In this condition, this unit does not accept any button except this switch.

4. Advanced AL24 indicator

Indicates that audio signals of a BD, DVD, etc., are being processed digitally with the Advanced AL24 Processing.

5. VIDEO NR indicator

Indicates that video signals of a BD, DVD, etc., are being processed digitally with the DNR (Digital Noise Reduction) processing.

6. Infrared sensor window

Receives signals from your remote control so that you can control the unit from a distance.

7. Display

Refer to "Front Panel Display" on page 9.

8. SD CARD slot

Insert an SD Memory Card, and play back the contents in it.

9. Disc tray

Place a disc when opening the disc tray.

10. ▲ (OPEN/CLOSE) button

Press to open or close the disc tray.

11. ► (PLAY) button

Press to start or resume playback.

12. (STOP) button

Press to stop playback.

13. I◀◀ / ▶▶I (SKIP ĎOWN/UP) button

Press to skip down/up titles/chapters/tracks/files.

14. ◄◄ /▶► (FAST FORWARD/REVERSE) button

Press to search forward / backward through a disc.

15. II (STILL/PAUSE) button

Press to pause playback.

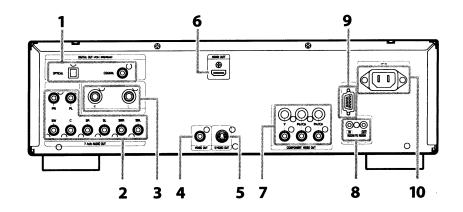
16. VIDEO NOISE REDUCTION button

Press repeatedly to reduce the overall level of noise on the picture (DNR). Each time you press the button, the level of the DNR switches "Off" \Rightarrow "+1" \Rightarrow "+2" \Rightarrow "+3" \Rightarrow "Off".

17. HDMI RESOLUTION button

Press to set the HDMI jack's video signal output mode.

Rear Panel



1. DIGITAL OUT (OPTICAL/COAXIAL) jack

Use digital audio coaxial/optical cable to connect to an AV receiver, Dolby Digital decoder or other device with a digital audio coaxial/optical input jack.

2. 7.1ch AUDIO OUT jacks

Use an RCA audio cable to connect these jacks to the 7.1-channel audio input jacks of your amplifier with 7.1-channel input terminals.

3. 2ch AUDIO OUT jacks

Use an RCA audio cable to connect these jacks to the 2-channel audio input jacks of your amplifier with 2- channel input terminals.

4. VIDEO OUT iack

Use an RCA video cable to connect to a TV monitor, AV receiver or other device.

5. S VIDEO OUT iack

Use an S-video cable to connect to the S-video input jack of external device.

6. HDMI OUT iack

Use an HDMI cable to connect to a display with an HDMI input jack.

7. COMPONENT VIDEO OUT jacks

Use a component video cable to connect to a display device with component input jacks.

8. REMOTE CONTROL IN / OUT jacks

Connecting the DENON Satellite Remote Control to these jacks enables you to operate more than one DENON components with one remote control.

9. CONTROL CONNECTOR (RS-232C)

This is a terminal for future system extension.

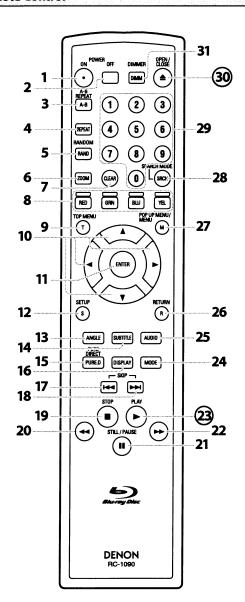
10. AC IN Terminal

Use to connect the AC cord to supply the power.

Note

 Do not touch the inner pins of the jacks on the rear panel. Electrostatic discharge may cause permanent damage to the unit. Introduction Introduction

Remote Control



The unit can also be turned on by pressing the buttons with circled numbers.

1. POWER ON button

• Press to turn the unit on.

2. POWER OFF button

• Press to turn the unit to standby mode.

3. A-B REPEAT button

 Press to mark a segment between A and B for A-B repeat playback.

4. REPEAT button

Press to select the repeat mode.

5. RANDOM button

 Press to display the random playback screen for shuffling the playback order of tracks/files.

6. ZOOM button

• During playback, press to enlarge the picture on the screen.

7. CLEAR button

 Press to clear the information once entered, to clear the marker settings, or to cancel the programming for CD, etc.

8. RED/GRN/BLU/YEL button

· Press to select item on some BD menus.

9. TOP MENU button

• Press to display the top menu.

10. Cursor $\triangle / \nabla / \triangle / \triangleright$ buttons

Press to select items or settings.

11. ENTER button

Press to confirm or select menu items.

12. SETUP button

• Press to display the setup menu.

13. ANGLE button

- Press to access various camera angles on the disc.
- Press to rotate the JPEG/Kodak Picture images.

14. SUBTITLE button

Press to display the subtitle menu.

15. PURE DIRECT button

 Press to stop output of video signals, etc., and output only the analog audio signals to achieve high quality sound from analog audio outputs.

16. DISPLAY button

• Press to display the On-Screen display menu.

17. SKIP I◀◀ button

 During playback, press to return to the beginning of the current title chapter, track or file.

18. SKIP ▶▶I button

• During playback, press to skip the next chapter, track or file.

19. STOP button

- Press to stop playback.
- · Press to exit from the title menu.

20. REW ◀◀ button

During playback, press to fast reverse the playback.

21. STILL/PAUSE II button

- Press to pause playback.
- When playback is in pause, press repeatedly to forward the playback step by step.

22. FFW ▶► button

- During playback, press to fast forward the playback.
- When playback is in pause, press to slow forward the playback.

23. PLAY ▶ button

Press to start playback or resume playback.

24. MODE button

- During playback, press to display the picture adjustment menu, and rapid playback.
- During the JPEG playback, press to display menus for changing the visual effect for switching the image or changing the size of the image.
- In stop mode with BD inserted, press to display a menu for setting the BD audio mode.
- In stop mode with BD or DVD inserted, press to display a menu for setting the virtual surround.
- In stop mode with audio CD, or disc with MP3, Windows Media™ Audio, JPEG files inserted, press to display menus for program and random playback.

25. AUDIO button

• Press to display the audio menu.

26. RETURN button

Press to return to the previously displayed menu screen.

27. POP UP MENU / MENU button

• Press to display the disc menu.

28. SEARCH MODE button

• Press to display the search menu.

29. Number buttons

Press to enter the title/chapter/track/file numbers.

30. OPEN/CLOSE ▲ button

• Press to open or close the disc tray.

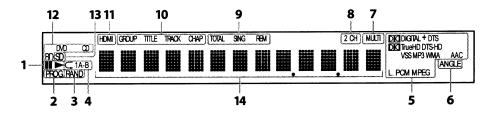
31. DIMMER button

Press to adjust the brightness of the front panel display.

Note

[ZOOM] and [RANDOM] are not available for BD.

Front Panel Display



- 1. ► : Appears when playing back a disc.
 - **II**: Appears when playback is paused.
- 2. Appears during program playback.
- 3. Appears during random playback.
- 4. Appears during repeat playback.
- 5. These indicate the format being decoded.
 - This is not a indication of the recorded format or the format that will be output.
- 6. Appears when playing back a multi angle
- Appears when playing back a multi-channel audio disc.
- 8. Appears when playing back a 2-channel audio disc.
- 9. Indicates the time display mode.
 - TOTAL: Appears when displaying the total remain/elapsed time of audio CD.
 - SING: Appears when sound data is being played or sound data is highlighted in program menu.

- REM : Appears when displaying remaining time.
- 10. These indicate the type of the different sections of the currently playing disc.
- Appears when HDMI video or audio signals are being output.
 Does not appear when HDMI connection is not verified.
- 12. Indicates the type of the currently playing disc.
- 13. Appears when inserting an SD Memory Card.
- 14. Appears various type of information on the disc, the elapsed playing time, etc.

Examples of Displays during Operation

Display	Description
POWER-ON	Power on
POWER-OFF	Standby mode
OPEN	Tray open
CLOSE	Tray is closing
LOADING	Loading the disc
NO DISC	No disc inserted
NO SD MEMORY	No SD Memory Card inserted
	This unit cannot read the disc or SD Memory Card inserted.
STOP	Stop mode.
480.i	HDMI output mode(480i) is selected.
480.P	HDMI output mode(480p) is selected.
720.P	HDMI output mode(720p) is selected.
1080.i	HDMI output mode(1080i) is selected.
1080.P	HDMI output mode(1080p) is selected.
1080.P24	HDMI output mode(1080p24 frame) is selected.
Normal	Pure direct mode is set to pure direct off.
Display Off	Pure direct mode is set to front panel display off.
Video Off	Pure direct mode is set to video signal off.
All Off	Pure direct mode is set to video signal and front panel off.
P00 01	The total number of the track that has been registered for the program playback and track number currently selected.
P00 F001-0002	The total number of the files that has been registered for the program playback and folder/file number currently selected.
P00 R00T-0002	When the root folder is selected "ROOT" is displayed.
ALL CLEAR	"All Clear" for program playback setting is selected.

Adjusting the Brightness of the Display

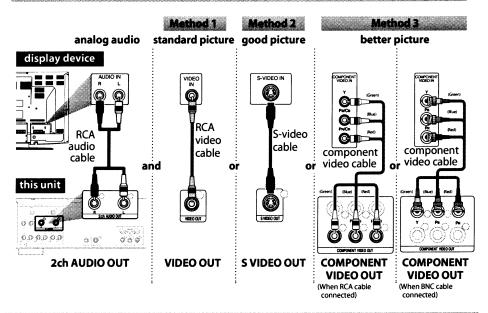
You can adjust the brightness of the display by the pressing [DIMMER] repeatedly. The brightness changes as bright → dimmer → auto each time you press [DIMMER]. If you select auto, the display gets dimmer during playback.

Note

 When playing back the disc that contains more than 100 titles, display of the chapter and time on the front panel display will be moved a few dots to the right.

Connecting to a TV

Make one of the following connections, depending on the capabilities of your existing device.



Supplied cables used in this connection are as follows:

- RCA audio cable (L/R) x 1
- RCA video cable x 1

Please purchase the rest of the necessary cables at your local store.

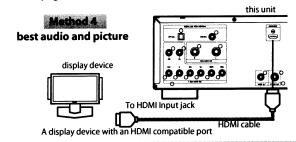
Note

- Connect this unit directly to the TV. If the RCA audio/video cables are connected to a VCR, pictures may be distorted due to the copy protection system.
- If the display device to which the player is to be connected is compatible with progressive scan video, connect to the component video input or HDMI input jack.
- If you use the method 3 to display device not compatible with the progressive scan video, set "Component Output" to "480i".
- If the picture is not output properly to the display device because of the "HDMI Video
 Resolution" or "Component Output" setting, press and hold ➤ on the front panel for more than
 5 seconds. The "HDMI Video Resolution" setting will be reset to the default automatically.

Connecting to a Display Device with HDMI Cable

Connecting this unit to device with an HDMI jack using an HDMI cable enables digital transfer of both digital video signals and multi-channel audio signals.

After making the connection, please make HDMI settings on setup menu according to your display device. Refer to page 30-32.

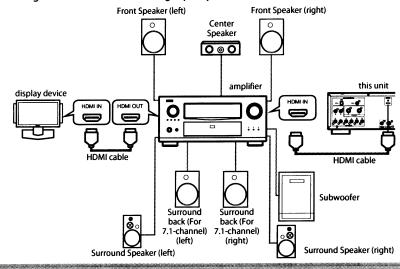


Cables not included.

Please purchase the necessary cables at your local store.

Connecting to a Display Device and an Amplifier/Receiver with HDMI Cable

Connecting this unit to display device and an amplifier/receiver with an HDMI jack using HDMI cables enables digital surround sound with high quality video.



Cables not included.

Please purchase the necessary cables at your local store.

HDMI Output Mode and Actual Output Signals

Press <hDMI RESOLUTION> to select the HDMI output mode. HDMI video resolution changes as following.

Front Panel Display	HDMI Video Resolution	
480.i	480 Interlaced	
Press <hdmi re<="" td=""><td>ESOLUTION> 1</td></hdmi>	ESOLUTION> 1	
480.P	480 Progressive	
Press <hdmi re<="" td=""><td>SOLUTION> 1</td></hdmi>	SOLUTION> 1	
720.P	720 Progressive	
Press <hdmi resolution=""> ↓</hdmi>		
1080.i	1080 Interlaced	
Press <hdmi resolution=""> ↓</hdmi>		
1080.P	1080 Progressive	
Press < HDMI RE	SOLUTION>	
1080.P24	1080 Progressive 24 frame	
Press <hdmi resolution=""></hdmi>		

Note

- You can change the HDMI output mode with the <HDMI RESOLUTION> during playback as well.
- After you select a HDMI output mode, corresponding HDMI video resolution will be output. The HDMI video resolution you selected will be output even if the connected display device is not compatible with the HDMI video resolution. If there is no image displayed on the connected display device, please select another HDMI video resolution.
- Video and audio signals may distorted temporarily when switching to/from the HDMI output mode.
- You can also change the HDMI output mode from "HDMI Video Resolution" in the "Video" menu on the setup menu. In this menu, you can confirm what HDMI video resolutions are supported by connected display device. Refer to page 31.
- In order to get natural and high quality film reproduction of 24-frame film material, use HDMI cable (High Speed HDMI cable is recommended) and select "1080p24" if the connected display device is compatible with 1080p24 frame input.
- Even if you set to "1080p24" for the "HDMI Video Resolution", when the contents of the disc is not compatible for 1080p24 frame, 1080p60 frame will be output.
- If connected display device does not support 1080p24 frame or "I/P Direct" is set to "Off", "1080p24" will not be available.
- "1080p24" can be displayed on the front panel, only when the connected display device supports the HDMI resolution.
- There is no output from VIDEO OUT, S VIDEO OUT and COMPONENT VIDEO OUT jacks when you
 play back a BD that recorded 24-frame film material.
- COMPONENT VIDEO OUT jacks may not output any signals when you set "HDMI Select" to "RGB" or "HDMI Deep Color" to "Auto".

Audio Setting

When using HDMI connections make the "HDMI Audio Out" settings in the "Audio" menu on the setup menu according to the specifications of the device or monitor to be connected.

Device to be connected	"HDMI Audio Out" setting	Output HDMI audio signal
Device compatible with DTS, DTS-HD, Dolby Digital, Dolby Digital Plus or Dolby TrueHD decoding	HDMI Multi(Normal)	Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS, or DTS-HD bitstream are output from HDMI OUT. Make the speaker settings on the connected AV amplifier, etc.
Device compatible with 3 or more channels of audio inputs (not DTS, DTS-HD, Dolby Digital, Dolby Digital Plus or Dolby TrueHD compatible)	HDMI Multi(LPCM)	Multi-channel audio signals are output from the HDMI terminal. Make the speaker settings with the speaker setting items appear after you select "HDMI Multi(LPCM)". Refer to page 32.
Device compatible with 2-channel audio input or device not compatible with audio input	HDMI 2ch	Down-mixed 2-channel audio signals are output from HDMI OUT.
HDMI connection to a display device, and digital audio connection (coaxial/optical) to an AV amplifier.	Audio Mute	HDMI audio will be muted, and Dolby Digital/DTS bitstream or LPCM will be output from DIGITAL OUT depending on the "Digital Out" setting. Refer to page 12.

■ Audio signals output from HDMI OUT

Disc type	Audio recording	"HDMI Audio Out" setting		ng
	format	HDMI Multi(Normal)	HDMI Multi(LPCM)	HDMI 2ch
	Dolby Digital	Dolby Digital*1	Multi LPCM	2ch Downmix LPCM
	Dolby Digital Plus	Dolby Digital Plus*1	Multi LPCM*2	2ch Downmix LPCM
BD-video	Dolby TrueHD	Dolby TrueHD*1	Multi LPCM*3	2ch Downmix LPCM
5U-Vigeo	DTS	DTS*1	Multi LPCM	2ch Downmix LPCM
	DTS-HD	DTS-HD*1	Multi LPCM*4	2ch Downmix LPCM
	LPCM	Multi LPCM	Multi LPCM	2ch Downmix LPCM
BD-RE/BD-R	AAC	Multi LPCM	Multi LPCM	2ch Downmix LPCM
DU-KE/DU-K	LPCM	Multi LPCM	Multi LPCM	2ch Downmix LPCM
	Dolby Digital	Dolby Digital	Multi LPCM	2ch Downmix LPCM
DVD-video	DTS	DTS	Multi LPCM	2ch Downmix LPCM
	LPCM	Multi LPCM	Multi LPCM	2ch Downmix LPCM
est sell	Dolby Digital	Dolby Digital	Multi LPCM	2ch Downmix LPCM
DivX	MP3/MP2	2ch LPCM	2ch LPCM	2ch LPCM
audio CD/ M		2ch LPCM	2ch LPCM	2ch LPCM
Media" Aud	io			
DTS-CD		DTS	Multi LPCM	2ch Downmix LPCM

Connections

- *1If "BD Audio Mode" is set to "Mix Audio Output" audio will be output as Multi LPCM. Refer to page 23.
- *2Outputs audio signals decoded from independent substream.
- *3Outputs audio signals decoded from Dolby TrueHD audio stream.
- **For DTS-HD Master Audio, outputs audio signals decoded from DTS-HD audio stream, and for DTS-HD High Resolution Audio, outputs audio signals decoded from DTS core stream.
- If the connected device is not compatible with the HDMI BITSTREAM, audio will be output as Multi LPCM or 2ch Downmix LPCM depends on the capability of the connected device even if you select "HDMI Multi(Normal)" in "HDMI Audio Out" setting. Refer to page 32.

Copyright protection system

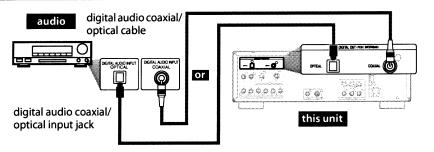
To play back the digital video images of a BD/DVD via an HDMI connection, it is necessary that both the unit and the display device (or an AV amplifier) support a copyright protection system called HDCP (high-bandwidth digital content protection system). HDCP is copy protection technology that comprises data encryption and authentication of the connected AV device. This unit supports HDCP. Please read the operating instructions of your display device or AV amplifier) for more information.

* HDMI: High-Definition Multimedia Interface

Note

- When using HDCP-incompatible display device, the image will not be viewed properly.
- Among the devices that support HDMI, some devices can control other devices via the HDMI jack, this unit cannot be controlled by another device via the HDMI jack.
- The audio signals from the HDMI jack (including the sampling frequency, the number of channels and bit length) maybe limited by the device that is connected.
- Among the monitors that support HDMI, some do not support audio output (e.g., projectors). In connections with device such as this unit, audio signals are not output from the HDMI output jack.

Digital Connection to an AV Amplifier with Built-in Decoder



■ Audio signals output from DIGITAL OUT (OPTICAL/COAXIAL)

When both HDMI and DIGITAL OUT is connected to other devices, the audio signals currently output from the HDMI OUT will be output from the DIGITAL OUT jack as well, except that Dolby Digital signal will be output instead of Dolby Digital Plus and Dolby TrueHD, and DTS signal will be output instead of DTS-HD. < When HDMI is not connected or "Audio Mute" is selected...>

When HDMI is not connected or the "Audio Mute" is selected in "HDMI Audio Out" setting, the audio signals output from DIGITAL OUT changes depending on the "Digital Out" setting. Refer to the following table.

To set "Digital Out", press [SETUP], then select "Quick" → "HDMI Audio Out" → "Audio Mute" or "Custom" → "Audio" → "HDMI Audio Out" → "Audio Mute".

Disc type	Audio recording format	"Digital Out" setting	
		Bitstream	LPCM
	Dolby Digital	Dolby Digital	2ch Downmix LPCM
	Dolby Digital Plus	Dolby Digital	2ch Downmix LPCM
	Dolby TrueHD	Dolby Digital	2ch Downmix LPCM
BD-video	DTS	DTS*1	2ch Downmix LPCM
	DTS-HD	DTS*1	2ch Downmix LPCM
	LPCM	2ch Downmix LPCM*1	2ch Downmix LPCM
	AAC	2ch Downmix LPCM	2ch Downmix LPCM
BD-RE/BD-R	LPCM	2ch Downmix LPCM	2ch Downmix LPCM
	Dolby Digital	Dolby Digital	2ch Downmix LPCM
DVD-video	DTS	DTS	2ch Downmix LPCM
	LPCM	2ch Downmix LPCM	2ch Downmix LPCM
-:	Dolby Digital	Dolby Digital	2ch Downmix LPCM
DivX*	MP3/MP2	2ch LPCM	2ch LPCM
audio CD/ MP3/	Windows Media™ Audio	2ch LPCM	2ch LPCM
DTS-CD		DTS	2ch Downmix LPCM

- *1 When "BD Audio Mode" is set to "Mix Audio Output", "HDMI Audio Out" is set to "Audio Mute" and "Digital Out" is set to "Bitstream", those audio will be output as Dolby Digital.
- This table applies only when HDMI is not connected or the "Audio Mute" is selected in "HDMI Audio Out" setting.

Note

 In order to output LPCM signal from DIGITAL OUT jack while outputting the HDMI audio signal, set "BD Audio Mode" to "Mix Audio Output" and set "HDMI Audio Out" to "HDMI Multi(LPCM)".

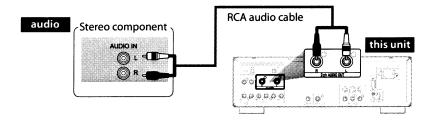
Note for Optical Cable

- Optical cable may be damaged when bent at sharp angles. Ensure cables are coiled in loops with a diameter of 6 inches (15cm) or more when storing them.
- Use a cable which is 9.8 feet (3m) or shorter.
- Insert cable plugs firmly into the jacks when making connections.
- If a plug has dust or is dirty, clean it with a soft cloth before inserting it into a jack.

Cables not included.

Please purchase the necessary cables at your local store.

Connection to a Device with 2-channels of Analog Audio Inputs



Supplied cables used in this connection are as follows:

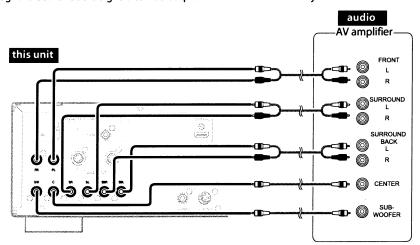
• RCA audio cable (L/R) x 1

Note

 When connecting to a 2-channel audio stereo device, use the 2ch AUDIO OUT jacks. If the 7.1ch AUDIO OUT jacks are used, set "7.1ch Audio Out" in the "Audio" menu to "2 Channel" (Refer to page 33). For software recorded in multi-channel, analog signals that have been down-mixed into 2 channels are output. (For sources which are prohibited from down-mixing, only the FL/FR signals are output.)

Surround Connections to a Device with 7.1/5.1-channels of Analog Audio Inputs

Analog 7.1ch/5.1ch audio signals can be output from 7.1ch AUDIO OUT jacks.



Supplied cables used in this connection are as follows:

• RCA audio cable (L/R) x 1

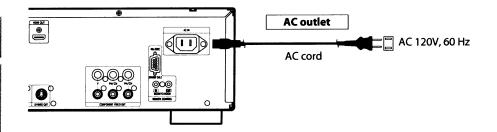
Please purchase the rest of the necessary cables at your local store.

Note

If you connect to 5.1-channel surround system, do not connect to SBR/SBL (surround back R/L)
jacks, then set "Surround Back" in "Speaker Configuration" to "None".

Connecting the AC cord

After you made all necessary connections, connect the AC cord to the AC IN. Then connect the AC cord to the AC outlet.



Supplied cables used in this connection are as follows:

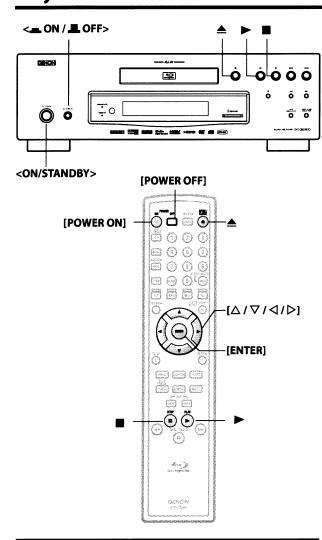
• AC cord x 1

Note

• Insert the plugs securely. Incomplete connections will result in the generation of noise.

ENGLISH

Playback



About the button names in this explanation

- <>: Buttons on the main unit
- []: Buttons on the remote control

Button name only:

Buttons on the main unit and remote control

Turning the Power On

Press < ON / OFF>.

The power indicator lights red and the power is set to the standby mode.

Press < ON/STANDBY> or [POWER ON].
The power indicator lights green and the power turns on.

■ Turning the power off

Press <ON/STANDBY> or [POWER OFF].

• The power is set to the standby mode.

Press < ON / OFF>.

• The power indicator turns off, and so does the power.

Note

 Power continues to be supplied to some of the circuitry even when the power is in the standby mode. When leaving home for long periods of time or when traveling, either press
 ON / LOFF> to turn off the power, or unplug the AC cord from the AC outlet.

Direct Playback

BD-V DVD-V DVD-VR CD

Turn on the power of this unit. (Refer to "Turning the Power On" on this page.)

Turn on the display device and select the appropriate input on the device to which the unit is connected.

Press ≜ to open the disc tray.

Place the disc on the disc tray with its label side facing up.



Press ≜ to close the disc tray.

It may take a while to load the disc.

Some discs may start playback automatically.

Press ➤ to start playback.

For many of BD-video and DVD-video, a menu screen may appear.

In this case, use [△/▽/√/▷] to select the desired

Press ■ once to stop playback temporarily.
Refer to "Resume Playback" on page 16.

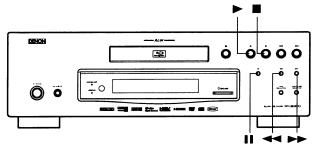
item, then press [ENTER].

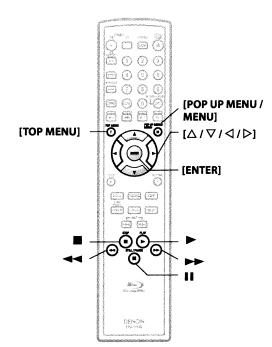
To eject the disc:

Press ≜ to open the disc tray, then remove the disc before turning off the unit.

Note

- O may appear at the top-right on the screen when the operation is prohibited by the disc or this unit.
- During the playback of 2-layered disc, pictures may stop for a moment. This happens when the 1st layer switches to the 2nd layer. This is not a malfunction.
- The operation may vary when you play back BD/DVD with disc menu. Refer to the manual accompanying the disc for details.





About the button names in this explanation

- <>: Buttons on the main unit
- []: Buttons on the remote control

Button name only:

Buttons on the main unit and remote control

Operations Using Disc Menu, Title Menu, and Popup Menu

BD-V DVD-V DVD-VR

Many of BD and DVD disc contains Disc menu (DVD), Title menu (BD/DVD) or Pop-up menu (BD-video) which describes the contents of the disc, or a disc menu, which guides you through the available functions in the disc. The contents of the menus may differ depending on the discs.

Disc menu (DVD)

- 1) Press [POP UP MENU / MENU].
 - The disc menu will appear.
- 2) Use $[\triangle/\nabla/\triangleleft/\triangleright]$ to select an item, then press [ENTER].

Title menu (BD/DVD)

- 1) Press [TOP MENU].
- 2) Use $[\triangle / \nabla / \triangle / \triangleright]$ to select an item, then press [ENTER].

Pop-up menu (BD-video)

- This is a special feature available for some BD. When you
 press [POP UP MENU / MENU], a menu pops out on the
 screen while the contents still play back.
- 1) During BD playback, press [POP UP MENU / MENU].
- 2) Use $[\triangle/\nabla/\triangle]$ to select an item, then press [ENTER].

Note

- If the feature is not available, may appear on the TV screen.
- Contents of menus and corresponding menu operations may vary among discs. Refer to the manual accompanying the disc for details.

Playing Back a VR mode DVD-RW/-R

DVD-VR

When you are playing back a VR mode DVD-RW/-R, you can choose "Original" or "Playlist" if the disc contains a "Playlist".

- 1) In stop mode, press [POP UP MENU / MENU] to call up DVD menu.
- 2) Use [
 | √ | to select "Original" or "Playlist".



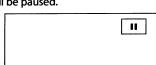
3) Use $[\triangle / \nabla]$ to select desired title, then press [ENTER].

Note

- "Original" is the title which is actually recorded on the disc.
- Playlist is edited version of the Original.
- DVD menu varies depending on discs.
- If the disc does not contain Playlist, Playlist will not be displayed on the DVD menu.

Pause

1) During playback, press II. Playback will be paused.



2) Press ➤ to return to normal playback.

Note

 For BD, DVD and DivX[®], set "Still Mode" to "Field" in the "Video" menu if pictures in the pause mode are blurred (refer to page 31).

Resume Playback

1) During playback, press ■.

• Resume message will appear on the screen.



<Example: BD>

2) Press ▶.

In a few seconds, playback will resume from the point at which it stopped last. To cancel the resume playback and start playing back the disc from the beginning, press **a**gain while the playback is stopped.

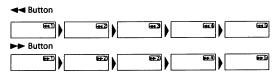
Note

- For MP3, JPEG or Windows Media™ Audio, playback will resume from the beginning of the current file.
- The resume information will be saved even when the power is in standby mode.
- If you open the disc tray or press again in stop mode, the resume information will be cleared.
- If you switch between "Disc" mode and "SD Memory" mode, the resume information will be cleared.

Fast Forward / Fast Reverse Playback

BD-V DVD-V DVD-VR MP3 WMA CD DivX*

1) During playback, press **◄◄** or **▶▶** repeatedly to select a desired forward or reverse speed.



2) Press ➤ to return to normal playback.

- · For BD and DVD, speed changes in 5 different levels. For audio CD, MP3, Windows Media™ Audio, and DivX®, speed changes in 3 different levels.
- For audio CD, MP3 and Windows Media™ Audio, sound will be output at any speed of fast forward and reverse search.

Note

- For MP3 and Windows Media™ Audio, fast forward/fast reverse search between different files are not available.
- For audio CD, fast forward/fast reverse search between different tracks are not available during the program and random playback.
- function.

Step by Step Playback

BD-V DVD-V DVD-VR DivX*

1) During playback, press II.

• Playback will pause and sound will be muted. The disc advances frame by frame each time !! is pressed.



2) Press ➤ to return to normal playback.

Note

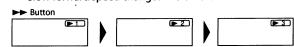
- Set "Still Mode" to "Field" in the "Video" menu if pictures in the pause mode are blurred (refer to page 31).
- Only step by step forward is available.

For some DivX® files, fast forward/fast reverse search may not

Slow Forward Playback

BD-V DVD-V DVD-VR DivX*

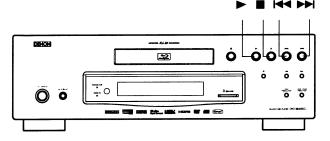
- 1) During playback, press II.
- 2) Press ▶►.
 - · Slow motion playback will begin and sound will be muted.
- 3) Press **>>** repeatedly to select a desired speed.
 - Slow forward speed changes in 3 different levels.

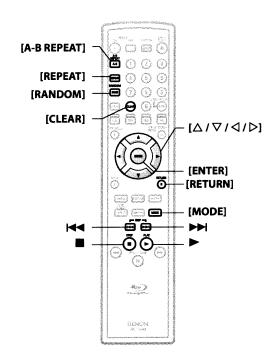


4) Press ➤ to return to normal playback.

Note

- Set "Still Mode" to "Field" in the "Video" menu if pictures in the slow playback mode are blurred (refer to page 31).
- Slow reverse is not available.





About the button names in this explanation

- <>: Buttons on the main unit
- []: Buttons on the remote control

Button name only:

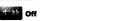
Buttons on the main unit and remote control

Dialog Speed

BD-V DVD-V DVD-VR

This function plays back approximately at 1.3 times of normal playback while keeping the sound output. This function is available only on discs recorded in the Dolby Digital format.

1) During playback, press [MODE] repeatedly until the dialog speed setting appears.



2) Press [ENTER] or [
| √ | to switch → (x1.3), or off.

"Off": Plays back in normal speed.

" ورس": Plays back approximately at 1.3 times of normal playback.

3) Press ➤ to return to normal playback.

Note

- Every time you press , the setting will be turned "Off".
- Subtitle can be viewed during this function.
- Picture adjustment, and audio language setting cannot be changed during this function.
- · Virtual surround does not function during this function.
- This function may not work at some points on a disc.
- During this function, Muilti/2ch LPCM will be output from HDMI output, 2ch LPCM will be output from digital audio output, or 2ch analog sound will be output from analog audio out.

Repeat Playback

Available repeat function may vary depending on the discs.

1) During playback, press [REPEAT] repeatedly until desired repeat mode appears on the screen.

The following repeat modes are available.

Repeat mode	Available media	
Chapter repeat The current chapter will be played back repeatedly.	BD-V DVD-V DVD-VR	
Title repeat		
The current title will be played back repeatedly.	BD-V DVD-V DVD-VR	
Track repeat	CD MP3 WMA	
The current track or file will be played back repeatedly.	JPEG DivX*	
Group repeat The current folder will be played back repeatedly.	MP3 WMA JPEG DivX°	
All repeat All titles, tracks or files in the media will be played back repeatedly.	DVD-VR CD MP3 WMA JPEG DivX°	

A-B Repeat

BD-V DVD-V DVD-VR CD DivX°

Desired section can be played back repeatedly.

- 1) Press [A-B REPEAT] at the desired starting point A.
- 2) Press [A-B REPEAT] at the desired ending point B.
 - The repeat sequence begins.
- 3) Press [A-B REPEAT] to exit the sequence.

Note

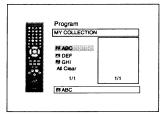
- The chapter/title/track/group repeat setting will be cleared when moving to other chapter, title, track/file or folder.
- Repeat playback does not function during A-B repeat playback.
- Repeat chapter/title is not available with some scenes.
- A-B Repeat can only be set within the current title or current track/file.
- A-B Repeat is not available with some scenes.
- To cancel the A point which was set, press [CLEAR].
- A-B Repeat playback does not function during chapter, title, track, group or all repeat playback.
- For some DivX® files, A-B Repeat playback may not function.

Program Playback

CD MP3 WMA JPEG

You can program the disc to play back in your desired order.

- 1) In stop mode, press [MODE].
 - The program screen will appear.
- 2) Use $[\triangle / \nabla]$ to select a track/file, then press [ENTER].



<Example: MP3>

- For MP3, Windows Media™ Audio, and JPEG, use [△/▽] to select a folder, then press [ENTER] first, and then use [△/▽] to select a track/file, then press [ENTER].
- Press [CLEAR] to erase the last track/file of the program.
- Select "All Clear" at the bottom of the list to erase all the tracks/files in the program.
- The programmed track/file is displayed in the right hand screen.
- If the entire program cannot be displayed on the screen, "▼" or "▲" appears.
- Use [⟨J/Þ⟩] to going back forward between the hierarchy of folders.
- If eight or more tracks/files were set in a program, use the
 Ideal (1) → I to see all the tracks/files.

3) Press ➤ to start program playback.

· Program playback will start.

Note

- During the program playback, press once to set the resume point, and then press ➤ to resume the program playback from where ■ was pressed (audio CD) or from beginning of the file where ■ was pressed (MP3, Windows Media™ Audio, or JPEG).
- During the program playback, press

 twice to display the
 program screen. To go back to the normal program playback,
 press [RETURN] to exit from the program screen, then press ►.
- Your program is still stored until either the disc tray is open or power is turned off.
- Up to 99 tracks/files can be entered.
- To repeat the current track/file in the program, press

 [REPEAT] repeatedly until " Track" appears during play
 back. To repeat the entire program press [REPEAT]
 repeatedly until " All" appears during playback.
- Even if an inserted disc contains mixed MP3, JPEG and Windows Media™ Audio files, program function allows 99 files in combination of MP3, JPEG and Windows Media™ Audio files.
- The current selected number on the front panel display blinks while setting the program playback.
- "F***" is displayed in the front panel display while selecting the folder.(*** is folder number.), and file is displayed as "-***" after the folder indication.
- Playback from a desired track/ file and random playback are not available during program playback.

Random Playback

CD MP3 WMA JPEG

This function shuffles the play back order of tracks/files.

1) In stop mode, press [RANDOM].

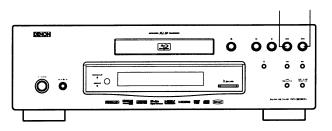


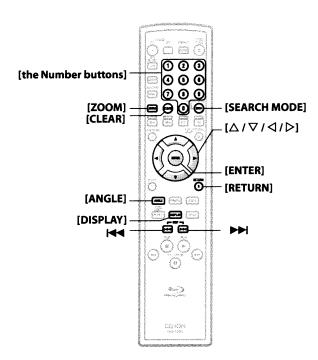
<Example: audio CD>

2) Press ▶ to start random playback.

Note

- During the random playback, press once to set the resume point, and then press ► to resume the random playback fromwhere ■ was pressed (audio CD) or from beginning of the file where ■ was pressed (MP3, Windows Media™ Audio, or JPEG).
- During the random playback, press twice to display the random playback screen. To cancel the random playback, press [RANDOM] when the random playback screen is displayed.
- To repeat the current track/file in the random selection, press [REPEAT] repeatedly until "Track" appears during playback. To repeat the entire random selection press [REPEAT] repeatedly until "All" appears during playback.
- You cannot go back to the previous track/file during random playback.
- For a disc containing mixed MP3, JPEG and Windows Media™ Audio files, random playback of those files will be performed.
- "RAND" is displayed on the front panel display.





About the button names in this explanation

<>: Buttons on the main unit

[]: Buttons on the remote control unit

Button name only:

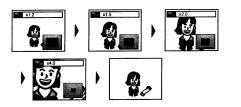
Buttons on the main unit and remote control unit

Zoom

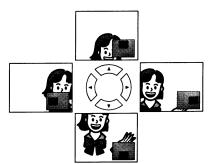
DVD-V DVD-VR JPEG DivX*

This function allows you to enlarge the video image and to pan through the zoomed image.

- 1) Press [ZOOM] during playback.
 - Playback will continue.
- 2) Press [ZOOM] repeatedly to select a desired zoom factor: x1.2, x1.5, x2.0, x4.0 or off.
 - "x4.0" zoom is not available for JPEG and DivX®.



3) Use $[\triangle/\nabla/\langle/|$ to move the zoomed picture across the screen.



4) Press [ZOOM] to exit zoom mode.

Note

- For BD, zoom function is not available.
- Zoom function does not work while disc menu is shown.
- · Navigation screen is not available on JPEG.
- You cannot pan through the zoomed picture on some JPEG files.
- For some DVD, "x4.0" zoom is not available.
- For DivX® files with small image, zoom function is not available.
- For DivX[®], depends on the size of the image, some zoom factor may not available.

Camera Angle

BD-V DVD-V

Some BD and DVD contain scenes which have been shot simultaneously from various angles. You can change the camera angle when appears on the screen.

1) Press [ANGLE] during playback.

- The selected angle will be displayed on the display bar at the top of the screen.
- 2) Use $[\triangle / \nabla]$ to select your desired angle.

Note

Search

■ Using |◀◀ / ▶▶|

 Press ►► to skip to the next chapter, track or file during playback.

To go back to the previous chapter, track or file, press I◀◀ twice in quick successions.

Note

If title contains no chapters, I◄◄ />>I changes the title.

■ Using [SEARCH MODE]

By using the **[SEARCH MODE]**, you can select following search options.

Search mode	Available media
Title / Chapter search	BD-V DVD-V DVD-VR
Track Search	CD MP3 WMA JPEG DivX
Time Search	BD-V DVD-V DVD-VR CD DivX®
Marker Search	BD-V DVD-V DVD-VR



Playback

- 1) Select a type of search by pressing [SEARCH MODE].
 - Every time you press [SEARCH MODE], type of search changes.
- 2) Enter the desired chapter, track, file, title number or time to search for using [the Number buttons].
 - · Chapter, title, track or time search will start.

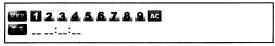
Note

- During program and random playback, search functions are not available except the search using I◄◄/►►.
- Time search function is available only in the same track, file or title.
- For some DivX® files, time search may not function.
- For BD, chapter and time search are available only during playback.

Marker search

This feature allows you to assign a specific point on a title or track to be called back later.

- During playback, press [SEARCH MODE] repeatedly until marker setting appears.
- 2) Use $[\langle \rangle \rangle]$ to select a marker number (1-9).



- When the disc reaches the point you want to set a marker, press [ENTER].
 - The title or track and elapsed playback time will appear on the screen.
- 4) Press [SEARCH MODE] or [RETURN] to exit.
- 5) To return to the marker later, call the marker setting by pressing [SEARCH MODE] repeatedly during playback or in stop mode, and use [
 | > | to choose a desired marker, then press [ENTER].

Note

- Opening the disc tray, turning off the power or selecting "AC" at step 2 and pressing [ENTER] will erase all markers.
- To clear a marker, use [
 I to select the marker number to be cleared and press [CLEAR].
- · You can mark up to 9 points.
- For BD, marker search between different titles is not available.
- For BD, you can return to the maker only during playback.

On-Screen Display

You can check information about the current disc by pressing [DISPLAY].

To call the On-Screen Display, press [DISPLAY] during playback. Each time you press [DISPLAY], the information changes. Depending on the media, available information varies.

BD-V

OFF → Title/Chapter information → Title information(elapsed time) → Title information(remaining time) → HDMI information → OFF

DVD-V DVD-VR

OFF → Chapter information (elapsed time)

- → Chapter information (remaining time) → Title information (elapsed time) → Title information (remaining time)
- → Bit rate information → HDMI information → OFF

CD

OFF → Track information (elapsed time) → Track information (remaining time) → Disc information* (elapsed time)

- → Disc information* (remaining time) → HDMI information
- → OFF

(*not available during the program/random playback)

MP3 JPEG

OFF → File name information → File information (elapsed time*) → HDMI information → OFF

(*not available for JPEG)

WMA

OFF → File name information → Tag information (title name)

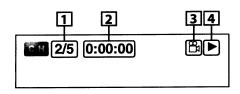
- → Tag information (artist name) → File information (elapsed time)
- → HDMI information → OFF

DivX*

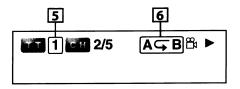
OFF → File name information → File information (elapsed time) → File information (remaining time) → HDMI information → OFF

 For audio CD, MP3, Windows Media™ Audio and JPEG, during the program or random playback, the indication will be displayed after the track/file information.

Chapter information

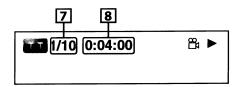


<Title / Chapter information for BD>



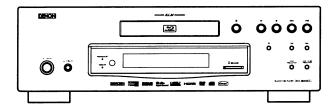
- 1. Current chapter number/total number of chapters
- 2. Elapsed time/remaining time of the current chapter
- 3. Indicates that the multi camera angle images are available on the scene
- 4. Current playback status
- 5. Current title number
- 6. Current repeat setting (Only when repeat setting is active) (C: Chapter repeat, T: Title repeat, AB: A-B repeat)

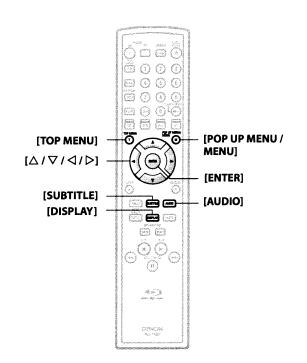
■ Title information



- 7. Current title number/total number of titles
- 8. Elapsed time/remaining time of the current title

Playback





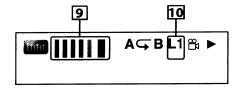
About the button names in this explanation

- <>: Buttons on the main unit
- []: Buttons on the remote control

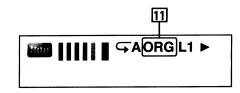
Button name only:

Buttons on the main unit and remote control

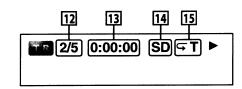
■ Bit rate information



<For VR mode DVD-RW/-R>

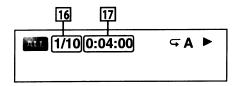


- Bit rate (the amount of video data currently being read)
 Layer number (Only for 2-layered discs)
 (L0: Layer 0 is played back. L1: Layer 1 is played back)
 Type of title (ORG: original, PL: playlist)
- Track/File information



- 12. Current track (file) number/total number of track (file)
- 13. Elapsed time/remaining time of the current track (file)
- 14. Indication of SD Memory Card playback
- 15. Current repeat setting (Only when repeat setting is active) (T: Track/file repeat, G: Group repeat, A: All repeat)

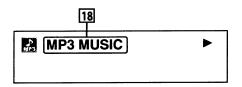
■ Disc information



- 16. Current track number/Total number of tracks
- 17. Elapsed time/remaining time of the current disc



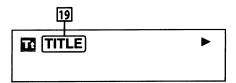
File name information

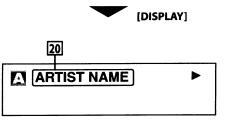


18. Media icon and File name



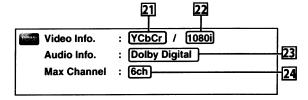
■ Tag information





- 19. Title name based on tag information of current Windows Media™ Audio file
- 20. Artist name based on tag information of current Windows Media™ Audio file

■ HDMI information



- 21. HDMI video format
- 22. Resolution of the HDMI output image
- 23. HDMI audio format
- 24. Maximum numbers of audio channels that can be accepted by the connected device

Note

 If HDMI is not connected, "---" will be displayed for HDMI information.

Selecting the Format of Audio and Video

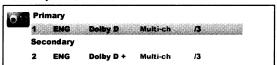
Selecting Audio Streams/Channels

BD-V | DVD-V DVD-VR CD | DivX*

Some BD and DVD contain multiple audio streams. Those are often in different audio languages or audio formats. For BD available audio varies depends on the "BD Audio Mode" setting. Refer to page 23 for more information.

BD-V

- 1) During playback, press [AUDIO].
- 2) Use $[\triangle / \nabla]$ to select "Primary" or "Secondary" audio to set, then press [ENTER].



"Primary" : Sets the audio for the main picture.

"Secondary": Sets the audio for the sub-picture. When

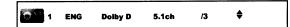
sub-picture is on, the "Secondary" audio will

be output with the sub-picture.

- In order to listen to the secondary audio, the "BD Audio Mode" must be set to "Mix Audio Output". Refer to page 23.
- 3) Use $[\triangle / \nabla]$ to select your desire audio stream/channel.
- 4) Press [AUDIO] to exit.

DVD-V DVD-VR CD DivX*

- 1) During playback, press [AUDIO].
- 2) Use [\triangle / ∇] to select your desired audio stream/channel.



• For audio CD, you can select following options.

: Both right and left channels are active (stereo)

"L-ch" : Only left channel is active "R-ch" : Only right channel is active

3) Press [AUDIO] to exit.

Note

- For VR mode DVD-RW/-R with MTS (Multi-channel Television Sound) system, you can switch between "1.Main" (main audio), "1. Sub" (sub audio), and "1.Main+Sub" (main and sub audio).
- For some BD, secondary audio will be output even when subpicture is off.
- The sound mode cannot be changed during playback of discs not recorded in multiple sound.
- Some discs allow to change audio language setting on the disc menu. (Operation varies between discs. Refer to the manual accompanying the disc.)
- Pressing [AUDIO] may not work on some discs with multiple audio Streams/Channels (e.g. DVD which allow to change audio setting on the disc menu).
- If you choose a language that has a 3-letter-language code, the code will be displayed every time you change the Audio Language setting, if you choose any other Languages, "--" will be displayed instead (refer to page 39).
- Audio Language selection cannot be made during dialog speed (refer to page 17).
- If the disc has no audio language, "Not Available" will be displayed.
- For discs with DivX[®] files, only MP3, MP2 or Dolby Digital audio is displayed. Other audio will be displayed with "-".
- For DTS-CD(5.1 music disc), selecting audio streams or channels is not available.

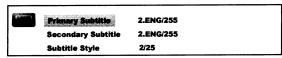
Selecting Subtitle Language

BD-V DVD-V DivX®

BD, DVD-video and DivX® may have subtitles in 1 or more languages. Available subtitle languages can be found on the disc case. You can switch subtitle languages anytime during playback.

BD-V

- 1) During playback, press [SUBTITLE].
- 2) Use $[\triangle / \nabla]$ to select "Primary Subtitle", "Secondary Subtitle" or "Subtitle Style", then press [ENTER].

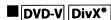


"Primary Subtitle": Sets the subtitle for the main picture.

"Secondary Subtitle": Sets the subtitle for the sub-picture.

"Subtitle Style": Sets style of the subtitle.

- 3) Use $[\triangle / \nabla]$ to select your desired subtitle.
- 4) Press [SUBTITLE] to exit.



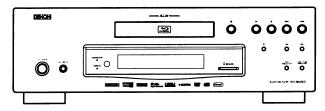
- 1) During playback, press [SUBTITLE].
- 2) Use $[\triangle / \nabla]$ to select your desired subtitle.

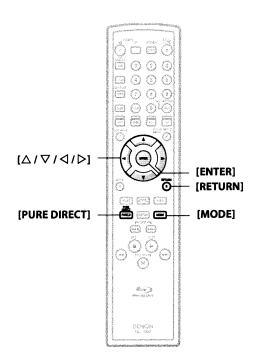


3) Press [SUBTITLE] to exit.

Note

- Some discs will only allow you to change the subtitle from the disc menu. Press [TOP MENU] or [POP UP MENU / MENU] to display the disc menu.
- If 4 digit language code appears in the subtitle menu, refer to "Language Code" on page 39.
- If the disc has no subtitle language or subtitle style, "Not Available" will be displayed.
- For DivX®, the screen only displays the number of subtitle languages.





About the button names in this explanation

<>: Buttons on the main unit

[]: Buttons on the remote control

Button name only:

Buttons on the main unit and remote control

Virtual Surround

BD-V DVD-V DVD-VR

You can enjoy stereo phonic virtual space through your existing 2-channel stereo system.

1) In stop mode, press [MODE] repeatedly until the virtual surround setting appears.



- Use [△/▽] to select "1" (Natural effect), "2" (Emphasized effect) or "Off".
- 3) Press [RETURN] to exit.

Note

- Select virtual surround "Off" or lower the volume if the sound is distorted
- This function cannot be used during dialog speed (refer to page 17).
- For the virtual surround, audio signal will always be 2-channel LPCM.

Pure Direct Mode

BD-V DVD-VR CD MP3 WMA

DivX®

Use this function to shut down unused circuitry to achieve high quality analog sound.

- Press [PURE DIRECT] repeatedly to select your desired pure direct mode.
 - Each time you press [PURE DIRECT], the pure direct mode changes as "Normal" → "Video Off" → "Display Off" → "All Off" → "Normal". The modes will be displayed on the front panel display.

Video / audio outputs for each mode

"Normal" : Normal playback mode (pure direct mode

is off).

"Video Off" : Video signal will not be output.

"Display Off" : Circuitry for front panel display and

indicators will be shut down.

"All Off" : Video signal will not be output and

circuitry for front panel display and indicators will be shut down.

Note

 If you turn off the unit or put this unit to standby mode, the pure direct mode will go back to "Normal".

Setting the BD Audio Mode

BD-V

BD audio mode is to choose between two ways; you could output the secondary and interactive audio accompanied by the primary audio or you could output the primary audio only. Depending on the setting of the mode, Dolby Digital, DTS, Dolby Digital Plus, Dolby TrueHD, or DTS-HD output changes between Multi LPCM and bitstream.

- 1) In stop mode with BD inserted, press [MODE].
- 2) Use $[\triangle / \nabla]$ to select desired setting.

"Mix Audio Output"

If it is available, BD video's secondary and interactive audio will be output with the primary audio.

 The secondary audio is the audio for the sub picture (Director's comment etc.) and the interactive audio is the audio for the interactive application (Button click sounds etc.).

#HD Audio Output"

Only the primary audio will be output. Set this mode in order to output Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS or DTS-HD sound of BD through HDMI connection.

- 3) Press [RETURN] to exit.
 - You can also set "BD Audio Mode" from the setup menu. Refer to page 32.

Note

- In "Mix Audio Output" mode, even you set "HDMI
 Multi(Normal)" in "HDMI Audio Out" setting, multi LPCM will
 be output from HDMI OUT for BD audio. Refer to page 11.
- In "Mix Audio Output" mode with HDMI audio being output,
 2-channel downmix LPCM will be output from DIGITAL OUT for BD audio.
- In "Mix Audio Output" mode with "HDMI Audio Out" set to "Audio Mute" and "Digital Out" set to "Bitstream", DTS, DTS-HD and LPCM will be output as Dolby Digital for BD audio, Refer to page 12.
- In "Mix Audio Output" mode, from 7.1ch AUDIO OUT, Dolby Digital Plus, Dolby TrueHD and DTS-HD will be output as multi LPCM decoded from its corresponding core stream.

Adjusting the Picture

DVD-V DVD-VR DivX*

You can adjust the picture quality and store the setting you have adjusted on memory 1-5.

- 1) During playback, press [MODE] repeatedly until the picture adjustment menu appears.
 - Picture adjustment menu:

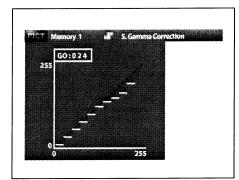
NOT	Memory 1	♦				
ł						

- Use [△/∇] to select a memory from "Memory 1" to "Memory 5" to store your setting, then press [ENTER].
- Use [△ / ▽] to select a item to be adjusted, then use [△ / ▷] to adjust the setting.

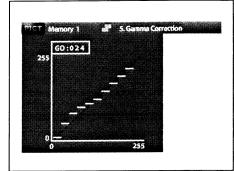


■ Gamma correction

- To adjust "Gamma Correction", after selecting the item at step 3, press [ENTER], then use [△/∇/⊲/▷] to adjust the setting.
- In the graph of gamma correction, the horizontal axis indicates the brightness level of the image that is recorded on the disc, and the vertical axis indicates the brightness level of the image when it is output from this unit.



• When bright points of the disc side are adjusted to the "dark" of the output side, the fine parts of the bright portion that normally become hard to see, become an easily discerned image.



- When dark points of the disc side are adjusted to the "bright" of the output side, the fine parts of the dark portion that normally become hard to see, become an easily discerned image.
- 4) Press [RETURN] repeatedly to exit.

Note

- This setting is not effective for the picture output from VIDEO OUT and S VIDEO OUT jack.
- The setting remains even you turn off the unit.
- You cannot adjust the setting during the rapid playback, or when the pure direct is set to "Video Off" or "All Off".
- DNR can also be adjusted by pressing **<VIDEO NOISE REDUCTION>** on the front panel. (refer to page 7.)

List of picture adjustment item/values

ltem	Description	Adjustment range (default)
1. Contrast	Adjusts the difference between the bright and dark parts of the picture.	-6 to +6 (0)
2. Brightness	Adjusts the brightness of the picture.	0 to +12 (0)
3. Enhancer	Strengthens the contours of the picture.	0 to +11 (0)
4. DNR	Reduces the overall level of noise on the picture.	Off to +3 (Off)
5. Gamma Correction	Detailed adjustment of the picture's brightness.	16 to 235 (G0=24/G1=32/G2=48/G3=64/ G4=80/G5=96/ G6=128/G7=160/ G8=192/G9=224)
6. Sharpness Mid	Adjusts the sharpness of the picture for the medium frequency range.	-6 to +6 (0)
7. Sharpness High	Adjusts the sharpness of the picture for the high frequency range.	-6 to +6 (0)
8. Hue	Adjusts the balance between the green and red.	-6 to +6 (0)
9. White Level	Adjusts the white level.	-5 to +5 (0)
10.Black Level	Adjusts the black level.	-5 to +5 (0)
11.Chroma Level	Adjusts the density of the colors.	-6 to +6 (0)
12.Setup Level	Makes the black parts of the pictures brighter.	0 IRE : Shows the original picture as recorded. 7.5 IRE : Makes the dark parts brighter. (7.5 IRE)
13.H_Position Control	Adjusts the left/right position.	-7 to +7 (0)
14.V_Position Control	Adjusts the top/bottom position.	-7 to +7 (0)

DENON

0

<u>-</u>0



MP3 WMA JPEG DivX*

فَ فَانَ فَا

õõ

0 0

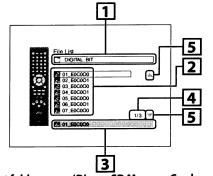
ò

Insert a DVD-RW/-R or CD-RW/-R with MP3, Windows Media™ Audio, JPEG, DivX® files.

- The file list will appear on the screen.
- If file list does not appear automatically, press [POP UP MENU / MENU].
- Press [POP UP MENU / MENU] to exit and resume the file list.

Use [△ / ▽] to select a desired folder or file, then press [ENTER]. Use |◄◀ / ▶► | to go back and forward between the hierarchies.

If you press [ENTER] on the files playback will start.



1. Current folder name (Disc or SD Memory Card name will be displayed for the top of the hierarchies.)

2. List of the file/folder names in the current folder/disc

3. Selected file/folder name

4. Current page / total page number

- 5. Indication of previous/next page
 - Use ◄◄ /►► to go back and forward between the pages.
 - Press [TOP MENU] to return to the first item.

icons:

: Folders

: MP3 files

🛃 : Windows Media™ Audio files

: JPEG files

: DivX® files



It is recommended that files to be played back in this unit are recorded under the following specifications:
<MP3 / Windows Media™ Audio>

• Sampling frequency : 44.1 kHz or 48 kHz

• Constant bit rate : 112 kbps - 320 kbps (MP3),

48 kbps - 192 kbps (Windows

Media™ Audio)

<JPEG>

• Upper limit : 2,560 x 1,900 dots

(sub sampling is 4:4:4) 5,120 x 3,840 dots

(sub sampling is up to 4:2:2)

Lower limit : 32 x 32 dots
 File size of image maximum : 12 MB

<DivX®>

Official DivX® Certified product

Playable codec of AVI files
 DivX® 3.x, DivX® 4.x, DivX® 5.x,

DivX® 6.0

• Maximum size of image : 720 x 480 @30 fps,

720 x 576 @25 fps

• Sampling frequency of audio : 8 kHz - 48 kHz

Audio type : MPEG1 audio layer 3 (MP3),

MPEG1 audio layer 2,

Dolby Digital

Note

The system can recognize up to 255 folders/999 files for CD, 999 folders/9999 files for DVD and SD Memory Card.

 The name of folder and file can be displayed up to 28 characters. Unrecognizable characters will be replaced with asterisks.

 The 9th and deeper hierarchies cannot be displayed for CD and the 10th and deeper hierarchies cannot be display for DVD and SD Memory Card.

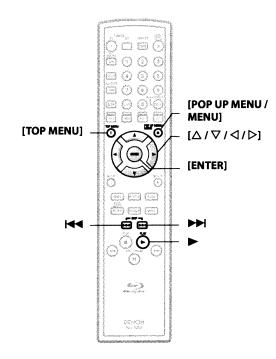
Files whose extension is other than ".mp3(MP3)"
 ".wma(Windows Media™ Audio)", ".jpg / .jpeg(JPEG)" or ".avi/.divx" will not be listed.

 Some unplayable folders or files may be listed due to the recording status.

High-resolution JPEG files take longer to be displayed.

 Progressive JPEG files (JPEG files saved in progressive format) cannot be played back on this unit.

 This unit recognize up to 8 characters of file name in the SD Memory Card. Characters after 9th will not be displayed.



-- ALH-

32

Ó

About the button names in this explanation

<>: Buttons on the main unit

[]: Buttons on the remote control

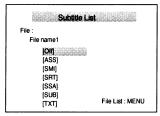
Button name only:

Buttons on the main unit and remote control

To Play Back the DivX® Subtitle Created by the User.

The subtitle created by the user can be displayed during DivX® playback.

- 1) After selecting the DivX[®] file, the "Subtitle List" will appear when "DivX Subtitle" is set to anything other than "Off". (Refer to page 30.)
- 2) Use [△/∇] to select the desired extension you want to display, then press [ENTER].



 DivX^{0} with the subtitle starts playback. The subtitle cannot be displayed when the setting is "Off".

- If there is more than one extension, the extension selection appears in the subtitle list.
- If you insert a DVD-RW/-R, CD-RW/-R with DivX[®] files that are
 mixed with MP3/Windows Media™ Audio/JPEG files, the
 playback media selection screen will be displayed. Use [△ / ▽]
 to select your desired media to play back then press [ENTER].



 Press [TOP MENU] to call up the playback media selection screen in stop mode.

Hint for the purchased or rental official DivX® Certified product

- When you purchased or rented a DivX[®] file through the official site of DivX[®] video which is called DivX[®] Video-On-Demand (VOD) services, a registration code is required every time you get the new file from the DivX[®] VOD services. Refer to "DivX(R) VOD" on page 37.
- Some DivX® VOD files are restricted with the limited playable times (you cannot play them back beyond the limit). If your DivX® VOD file has such limit, the playback confirmation screen will appear.



- Use [
 | >] to select "Yes" if you want to play back the file, or to select "No" if you do not wish to play it back. Then, press [ENTER] to confirm the selection.
- You cannot play back the DivX® VOD files, of which rental period has been expired. In such case, press [POP UP MENU / MENU] and select other files that can be played back.
- You cannot play back the DivX® VOD files obtained with different registration codes on this unit. Press [POP UP MENU / MENU] and select other files that can be played back.
- You cannot playback the DivX® file that has the resolution which this unit does not support. This unit does not support the DivX® files that have the image size that exceeds 720 x 480 @ 30fps or 720 x 576 @ 25fps.



Resolution Error

This player does not support this video format.

Please push 'MENU'.

What is DivX®?

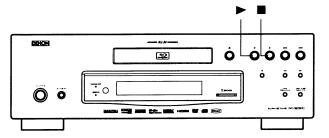
- DivX[®] is a codec (compression/decompression) that can compress images to a very small amount of data. The software can compress video data from almost any devices to the size that can be sent on the Internet without compromising visual quality of the images.
- A file with an extension of ".avi" and ".divx" is called an DivX[®] file, All files with the DivX[®] extension are recognized as MPEG4.
- For more information for DivX[®], please visit http://www.divx.com.

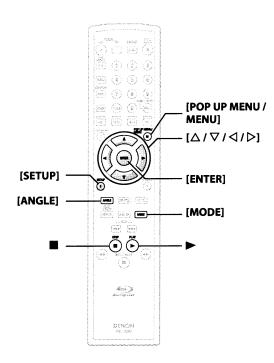
Note for DivX®

- Even if the file has an extension of either ".avi" and ".divx", this
 unit cannot play it back if it is recorded in the format other
 than DivX[®].
- It may take a while for audio and images to be output after you inserted a disc and pressed ►.
- When playing back the files recorded in high bit rates, the images can be interrupted in some occasions.
- Although DivX[®] logo has been obtained for this unit, it may not be able to play back some data, depending on the characteristics, bit rates, or audio format settings, etc.
- A DivX[®] file whose file size exceeds 2 GB cannot be played back.
- If a large-sized DivX® file is selected, it may take awhile to start the playback (over 20 seconds sometimes).
- If you try to playback the DivX® file that has the screen resolution which this unit does not support, the playback will be stopped and error message will appear.
- Some DivX[®] files cannot be played back on this unit due to the configuration and characteristics of the disc, or due to the condition of recording and authoring software.
- Multi-session burn DivX[®] DVD cannot be played back on this unit.

Note for DivX® Subtitle

- To utilize this function, the following conditions must meet.
- "DivX Subtitle" must be activated in "Language" setting.
 (Refer to "DivX Subtitle" on page 30.)
- Playback file and the subtitle file must have the same name.
- Playback file and the subtitle file must locate in the same folder.
- Only the subtitle files with the following extensions are supported; .smi (.SMI), .srt (.SRT), .sub (.SUB), .ass (.ASS), .ssa (.SSA), .txt (.TXT). (.sub (.SUB) and .txt (.TXT) files may not be recognized.)
- The subtitles that exceeds the playback time of the DivX[®] file will not be displayed.





About the button names in this explanation

- <>: Buttons on the main unit
- []: Buttons on the remote control

Button name only:

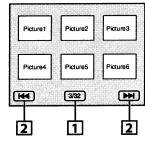
Buttons on the main unit and remote control

Kodak Picture CD

JPEG

This unit can also run JPEG files stored on Kodak Picture CD. You can enjoy picture images on the display device set by playing back the Picture CD. This unit confirms to ver.7.0 of Kodak Picture CD. For details of Kodak Picture CD, contact a shop that provides developing service of Kodak Inc.

When Kodak Picture CD is inserted in this unit, Kodak Picture CD menu appear automatically on the screen.



- 1. Current track number/the total number of tracks
- 2. Indication of previous/next page
 - In stop mode, press [POP UP MENU / MENU] to call Kodak Picture CD menu.
- Use $[\triangle/\nabla/\triangle/\triangle]$ to select a desired track to be played back, then press \triangleright or [ENTER].
 - An image will be played back from the selected track and go to the next one in turn.
- Press to stop playback.

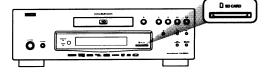
Tips for JPEG/Kodak Picture Playback

- Every press on [ANGLE] will turn the image clockwise by 90 degrees when an image is displayed.
- To change the visual effect for switching the playback image, press [MODE] once, then use [△/∇] or [ENTER] to switch between "Cut In/Out" and "Fade In/Out". The size change may have no effect on some files (e.g. files with a small picture size).
- To change the size of the playback image, during the JPEG/ Kodak Picture playback. Press [MODE] twice, then use [△/∇/
 [00%] and "Small" (93%). The size change may have no effect on some files (e.g. files with a small picture size).

Reading the SD Memory Card

MP3 WMA JPEG

You can play back the MP3, Windows Media™ Audio and JPEG files in an SD Memory Card. With the SD Memory Card, you can also enjoy the special additional contents for BD-ROM Profile 1.1 which can be downloaded from the internet. You can store the contents on an SD Memory Card via computer and play them back with the BD-video. For more information about the special additional contents, please refer to the instruction book that came with the disc.



Setting the media mode

Press [SETUP] in stop mode.

1 Use [◁/▷] to select , then press [ENTER].

Use [◁/▷] to select , then press [ENTER].

Use $[\triangle / \nabla]$ to select "Media Select".

Press [ENTER] repeatedly to select "SD Memory".

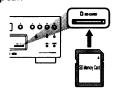


 This will set the unit to "SD Memory" mode. To play back the contents in any discs, exit "SD Memory" mode by selecting "Disc".

6 Press [SETUP] to exit.

■ Inserting the SD Memory Card and playback

Insert an SD Memory Card into the SD CARD slot until it clicks with the label facing up.
File list will appear.



Pollow the step 2 in "Playing Back an MP3, Windows Media™ Audio, JPEG and DivX® File" on page 25.

Removing the SD Memory Card

In stop mode, push the SD Memory Card and then slowly remove your finger.

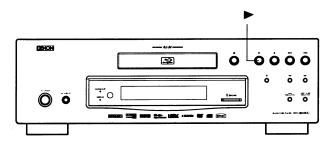
Grasp the card and pull it out from the SD CARD slot.

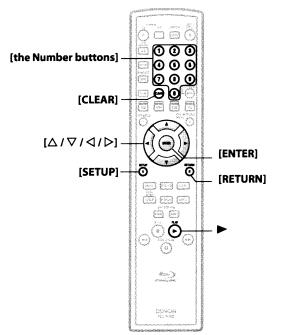
Compatible Cards:

- SD Memory Card (8MB 2GB)
- SDHC Memory Card (4GB)
- miniSD Card (8MB 2GB)
- microSD Card (8MB 2GB)
- For miniSD Card and microSD Card, adapter will be required.

Note

- Do not remove the card during its playback.
- This unit supports SD Memory Card with FAT12/FAT16 file system, and SDHC Memory Card with FAT32 file system.
- Do not delete the folders or files in the SD Memory Card with your computer. This unit might not read the SD Memory Card.
- This unit recognize up to 8 characters of file name in the SD Memory Card. Characters after 9th will not be displayed.





About the button names in this explanation

- <>: Buttons on the main unit
- []: Buttons on the remote control

Button name only:

Buttons on the main unit and remote control

Using the Setup Menu

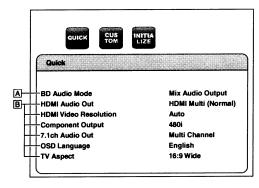
In the setup menu you can change the setting for audio, video, language, etc. You cannot change the setting during playback.

OUCK OUICK

Quick setting menu contains setting items extracted from accustom setting menu which may be used frequently.

Press [SETUP] in stop mode.

Use [◁/▷] to select one, then press [ENTER].



2 Use $[\triangle / \nabla]$ to select setting items.

Follow the procedure below depends on the setting items.

For setting item A:

Press [ENTER] repeatedly to change options.

For setting item B:

1)Press [ENTER].

2)Use $[\triangle / \nabla]$ to select options, then press [ENTER].

• Use [◁] or [RETURN] to go back to the previous screen.

Press [SETUP] to exit.

ess Custom

Custom menu contains all the setting items.

Press [SETUP] in stop mode.

Use $[\triangleleft / \triangleright]$ to select [], then press [ENTER].

Use [<//>
| > | to select your desired setting category, then press [ENTER].

: Language : Video : Audio : Ratings : Others

• For "Ratings", follow the procedure on page 36.

Use [\triangle / ∇] to select setting items.

 The setting items which are not available with current situation of this unit will be displayed in gray and you cannot select the items.

Follow the procedure below depends on the setting items.

For setting item A:

Press [ENTER] repeatedly to change options.

 For "DivX(R) VOD", press [ENTER] to display your registration code.

For setting item B:

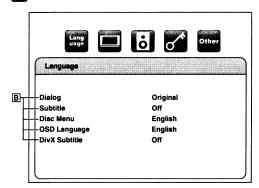
- 1) Press [ENTER].
- 2) Use $[\triangle / \nabla]$ to select options, then press [ENTER].
- Use [◁] or [**RETURN**] to go back to the previous screen.

6 Press [SETUP] to exit.

29

ENGLISH

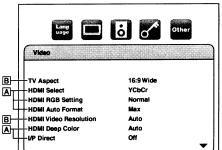
Function Setup Language



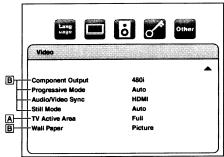
• For how to select the setting items and options, refer to "Custom" on page 29.

	Outi-u-
Setting items	Options
Dialog Sets the language for audio.	Original*/English/French/Spanish/German/Italian/ Swedish/Dutch/Russian/Chinese/Japanese/Korean/ Danish/Finnish/Norwegian/Icelandic/Hungarian/ Romanian/Turkish/Greek/Irish/Portuguese/Polish/ Czech/Slovak/Bulgarian/Other
Subtitle Sets the language for subtitle.	Off*/English/French/Spanish/German/Italian/Swedish/Dutch/Russian/Chinese/Japanese/Korean/Danish/Finnish/Norwegian/Icelandic/Hungarian/Romanian/Turkish/Greek/Irish/Portuguese/Polish/Czech/Slovak/Bulgarian/Other
Disc Menu Sets the language for disc menu.	English*/French/Spanish/German/Italian/Swedish/ Dutch/Russian/Chinese/Japanese/Korean/Danish/ Finnish/Norwegian/Icelandic/Hungarian/Romanian/ Turkish/Greek/Irish/Portuguese/Polish/Czech/Slovak/ Bulgarian/Other
OSD Language Sets the language for OSD (on-screen display).	English*/Français/Español
DivX Subtitle	Off* / English / French / Spanish
Sets the language for DivX [®] Subtitle.	

- Settings with (*) are the default.
- Quick menu consists of the setting menus frequently used, and they are accompanied with
- If you select "Other", enter the 4-digit number code for the desired language (refer to "Language Code" on page 39). Only the languages supported by the disc can be selected.



■ Wideo



• For how to select the setting items and options, refer to "Custom" on page 29.

Setting items	Options
Sets a picture size according to aspect ratio of the connected display device.	16:9 Wide*: Select this when a wide-screen TV is connected. Disc recorded in wide screen format is played over the entire screen. 4:3 Pan & Scan: Select this to play back the disc recorded in wide screen format with 4:3 TV in the pan & scan mode (with the sides of the picture cut off). Discs which pan & scan is not specified are played in the letter box mode. 4:3 Letter Box: Select this to play back the disc recorded in wide screen format with 4:3 TV in the letter box mode. (with black
	strips at the top and bottom). 4:3 Squeeze Auto: When playing 4:3 images, the picture is displayed in the center of the 16:9 screen with a 4:3 aspect ratio. 4:3 Squeeze On: The picture is displayed in the center of the 16:9 TV screen with a 4:3 aspect ratio, regardless of the original image size.
HDMI Select Select an HDMI output mode between "YCbCr" and "RGB".	YCbCr*: Component format video signals and audio signals are output from the HDMI OUT. RGB: RGB format video signals and audio signals are output from the HDMI OUT.

Setting items	Options
HDMI RGB Setting	Normal*:
Sets the digital RGB image range (data range) output from the HDMI	Output as "16 (black)" to "235 (white)".
OUT.	Enhanced:
	Output as "0 (black)" to "246 (white)".
	Depending on the display device you are using, the black colors may seem to stand out when using HDMI connections. If so, set to "Enhanced".
HDMI Auto Format	Max*:
Makes the setting of the "Auto" for "HDMI Video Resolution".	The maximum resolution that can be input to the connected HDMI device is detected and the HDMI output resolution is selected automatically.
	Panel: The number of pixels of the connected HDMI device's panel is detected and the HDMI output resolution is selected automatically.
HDMI Video Resolution	Auto*:
Sets the HDMI video resolution.	HDMI video resolution will be selected automatically depending on the connected HDMI device and setting of the "HDMI Auto Format".
	480i
	480p
	720p
	1080i
	1080p
	1080p24:
	Gives a natural and high quality film reproduction of 24- frame film material. The connected display device has to be compatible with 1080p24 frame input.
HDMI Deep Color	Auto*:
Sets whether output the picture from HDMI with the Deep Color or not.	The picture through the HDMI will be output with Deep Color to the connecting device via HDMI that is supported Deep Color.
	Off:
	The picture through the HDMI will be output without Deep Color.
I/P Direct	Off*:
Sets whether output the 24-frame material directly from the HDMI OUT	24 frame material will be converted to 60 frame and output 1080p60 frame from the HDMI OUT.
or not. This setting is for BD only.	On:
	24 frame material will be output directly 1080p24 frame from the HDMI OUT.

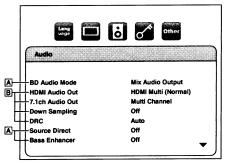
Options
480i*
480p
720p
1080i
Auto*:
The progressive mode will be selected automatically depends on the material type (film or video).
Video1: Suited for playing video material discs.
Video2: Suited for laying video material discs and 30-frame film material discs.
HDMI*: Synchronizes the audio with the video signal from HDMI OUT.
Progressive: Synchronizes the audio with the progressive video signal from COMPONENT VIDEO OUT.
Interlace: Synchronizes the audio with the Interlace video signal from COMPONENT VIDEO OUT(480i), VIDEO OUT or S VIDEO OUT.
Other: Select this when you want to view progressive, interlaced and HDMI pictures simultaneously. The audio signals are set to the optimum timing for the respective pictures. (They are not synchronized.)
Auto*: Automatically selects the best resolution setting ("Frame" or "Field") based on the data characteristics of the pictures.
Field: Stabilizes the pictures, although the picture quality may become coarse due to the limited amount of data. Select "Field" when the pictures are still unstable even if "Auto" is selected.
Frame: Displays relatively motionless pictures in higher resolution. "Frame" improves the picture quality, although it may unstabilize the pictures due to alternate output of two field data.

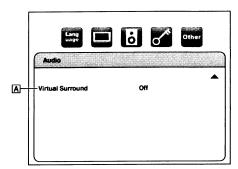
Function Setup Continue Stating items Ontions

Setting items	Options
TV Active Area	Normal:
Sets the horizontal display area for interlace (480i) output.	Select this if the image is not stable with connecting to professional-use display.
	Full*:
	Select this for connecting to commonly-marketed display.
Wall Paper	Picture*
Sets the picture to be displayed on the screen for stop mode or audio	Blue
	Black
playback mode.	Grav

- Settings with (*) are the default.
- Quick menu consists of the setting menus frequently used, and they are accompanied with mark.
- For "HDMI RGB Setting", select "Enhanced" if the black-white contrast is not clear. The setting is effective only for HDMI RGB output.
- If you set "HDMI Video Resolution" to "1080p24" and set "I/P Direct" to "On", and the contents of the BD is not compatible for 1080p24 frame, 1080p60 frame will be output.
- An individual picture on the screen is called as "Frame", which consists of two separate images called as "Field". Some pictures may be blurred at the auto setting in "Still Mode" due to their data characteristics.
- If the picture is not output properly to the display device because of the "HDMI Video Resolution" or "Component Output" setting, press and hold ▶ on the front panel for more than 5 seconds. Both settings will be reset to the default automatically.
- For "TV Aspect", 4:3 squeeze function is not available during BD playback.
- If HDMI is connected, for video resolution for the component output, you can only select video resolution that currently output from HDMI OUT or 480i.
- If the video resolution for the component output and HDMI video resolution does not match, the video resolution for the component output will be switched to 480i. COMPONENT VIDEO OUT jacks may not output any signals depend on the disc material.
- If you set "I/P Direct" to "On", there is no output from VIDEO OUT, S VIDEO OUT and COMPONENT VIDEO OUT jack.
- COMPONENT VIDEO OUT jacks may not output any signals when you set the "HDMI Select" to "RGB" or "HDMI Deep Color" to "Auto".
- If you play back copy-protected DVD video, 480p signal will be output from the COMPONENT VIDEO OUT jacks, when "Component Output" is set to "480i", "720p" or "1080i".
- If connected display device does not support 1080p24 frame or "I/P Direct" is set to "Off",
 "1080p24" in "HDMI Video Resolution" will be displayed in gray and you can not select the item.

Audio





• For how to select the setting items and options, refer to "Custom" on page 29.

Setting items	Options
For BD, select whether to output the secondary and interactive audio with primary audio if it is	Mix Audio Output*: Output the secondary and interactive audio with primary audio if it is available.
available or only the primary audio. Refer to "Setting the BD Audio Mode" on page 23.	HD Audio Output: Output only the primary audio. Set this mode in order to output Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS or DTS-HD sound of BD through HDMI connection.
HDMI Audio Out Sets the audio format for the audio output from the HDMI OUT.	HDMI Multi(Normal)*: The multi-channel audio signals are output from the HDMI OUT with a bitstream or LPCM.
	HDMI Multi(LPCM): The multi-channel audio signals are output from the HDMI OUT with a LPCM. • Refer to pages 34-35 for setting options.
	HDMI 2ch: The audio signals are output from the HDMI OUT with a downmixed to 2ch LPCM.
	 Audio Mute: Mutes the HDMI audio signal, and set the signal format of the DIGITAL OUT. Refer to the "Digital Out Setting" on page 33 for setting options.

Setting items	Options
7.1ch Audio Out Sets the audio format for the audio output from the 7.1ch AUDIO OUT.	Multi Channel*: The multi-audio signals are output from the 7.1ch AUDIO OUT. Refer to pages 34-35 for setting options.
	2 Channel: Down-mixed 2-channel audio signals are output from the 7.1ch AUDIO OUT jacks.
Down Sampling Sets the digital audio output when playing BD or DVD recorded in LPCM.	On: LPCM signals are converted to 48 kHz for output. Set to "On" when using digital connections to an AV amplifier that is not compatible with sampling frequencies of 96 kHz.
	Off*: For BD or DVD recorded in LPCM without copyright protection, 2-channel audio signals of up to 192 kHz are output as LPCM signals with no conversion.
DRC Sets whether to compress the range of sound volume (Dynamic Range Control) when Dolby Digital, Dolby Digital Plus or Dolby TrueHD audio is played back.	Auto*: When the discs that are recorded in the Dolby TrueHD format is in playback, this unit detects DRC setting of the disc and set the DRC setting of this unit to "On" or "Off" automatically. Off
Source Direct Sets to output the audio without adding speaker settings to the audio signals from the disc.	On: Select this to output the audio without any effect of speaker setting. Off*: Select this to output the audio with the effect of speaker setting.
Bass Enhancer Sets to output the lower frequency audio signal output from the speakers set to "Large" in the "Speaker Configuration" from Subwoofer to enhance the bass sound. This setting is effective for the signal output from 7.1ch AUDIO OUT and HDMI OUT (LPCM).	On: Lower frequency sound of the "Large" setting speakers will be added to the sound of the subwoofer. Off*: Normal sound signal will be output from subwoofer.

Setting items	Options
Virtual Surround Sets to create a surround effect in a system with 2 speakers	Off*: Virtual surround is set to off.
connected.	1: A natural surround effect in a system with 2 speakers connected.
	2: A stronger surround effect in a system with 2 speakers connected than "1".

- Settings with (*) are the default.
- Quick menu consists of the setting menus frequently used, and they are accompanied with



- If you set "Source Direct" to "On", "HDMI Audio Out" to "HDMI 2ch" or "7.1ch Audio Out" to "2 Channel", "Bass Enhancer" is not available.
- Under following circumstances, "HDMI Multi(Normal)", "HDMI Multi(LPCM)" and "HDMI 2ch" is not available.
 - HDMI cable is not connected to HDMI OUT jack.
 - Connected display device is off.
 - Connected display device is not compatible with audio output.

Digital Out Setting

When the "Audio Mute" is selected in "HDMI Audio Out" setting, audio signal of the HDMI is muted and the audio signals output from DIGITAL OUT changes depending on the "Digital Out" setting.

<"Digital Out" setting>

Audio → HDMI Audio Out → Audio Mute

Bitstream*:

When playing back discs recorded in Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS or DTS-HD, the corresponding core stream (Dolby Digital or DTS) are output.

LPCM:

LPCM signal will be output from DIGITAL OUT.

- This setting is not effective when the HDMI audio signal is output.
- When both HDMI and DIGITAL OUT is connected to other devices, the audio signals currently output from the HDMI OUT will be output from the DIGITAL OUT jack as well, except that Dolby Digital signal will be output instead of Dolby Digital Plus and Dolby TrueHD, and DTS signal will be output instead of DTS-HD.
- When "BD Audio Mode" is set to "HD Audio Output", Dolby Digital Plus, Dolby TrueHD, or DTS-HD will be output as core stream (Dolby Digital or DTS). If the audio source is Dolby Digital, DTS, or LPCM, the same audio stream type set in the "HDMI Audio Out" will be output. (When outputting Multi LPCM from HDMI OUT, 2ch Downmix LPCM will be output from DIGITAL OUT.)
- When "BD Audio Mode" is set to "Mix Audio Output", the audio output from DIGITAL OUT will follow the setting in the "HDMI Audio Out". (When outputting Multi LPCM from HDMI OUT, 2ch Downmix LPCM will be output from DIGITAL OUT.)

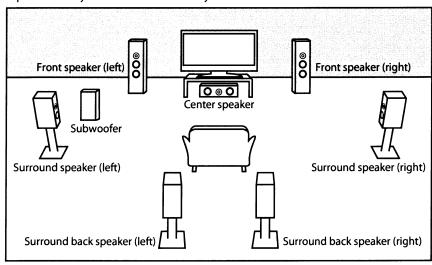


Function Setup

Speaker Setting

This unit allows you to enjoy multi-channel surround sound such as 7.1-channel / 5.1-channel surround.

<Example of basic layout with 7.1ch surround system>



To make the most of its feature, set up your speakers appropriately by referring to the table below. Speaker setting options are available at the following locations;

<Speaker setting for the audio signal output from the HDMI OUT jack >

(Available when you have HDMI cable connected to the HDMI OUT jack)

Setup → Quick → HDMI Audio Out → HDMI Multi(LPCM)

Setup → Custom → Audio → HDMI Audio Out → HDMI Multi(LPCM)

<Speaker setting for the audio signal output from the 7.1ch AUDIO OUT jacks >

Setup → Quick → 7.1ch Audio Out → Multi Channel

Setup → Custom → Audio → 7.1ch Audio Out → Multi Channel

How to navigate through the "HDMI Multi(LPCM)" and "Multi Channel" setting

- 1) Use $[\triangle / \nabla]$ to select the menu item.
- 2) Use $[\triangle / \nabla]$ to select setting items.
- Use [RETURN] to go back to the previous screen.
- Use [
 / ▷] to select desired options. (Except for "Test Tone" and "Default".)
 For "Test Tone":

Use $[\triangleleft / \triangleright]$ to select "Manual" or "Auto", then press [ENTER].

- The test tone will be output. If you select "Manual", use [△/▽] to select desired speaker, then use [△/▷] to adjust the volume. If you select "Auto", use [△/▷] to adjust the volume of the speaker that output the test tone.
- If you want to stop the test tone, press [RETURN].

For "Default":

Press [ENTER] to reset the "Delay Time" setting to the default.

4) Press [SETUP] to exit.

Menu	Setting items	Options	Descriptions
Speaker Configuration	Front	Large*	Large:
Select the desired		Small	For the large speakers with strong low frequency reproduction capabilities. Small: For the small speakers which do not provide
speaker to set. Then change the setting	Center	Large*	
appropriately by		Small/None	
referring to the descriptions.	Subwoofer	On*	
descriptions.		Off	strong bass sound.
	Surround	Large*	None:
		Small/None	No speakers. For "Subwoofer" there is
	Surround Back	Large*	only "On" or "Off".
		Small/None	
	Crossover Freq: For speakers set to "Small", the sound with frequencies below that of this frequency are cut. This bass sound that has been cut is output from the subwoofer or a speaker for which "Large" is set.	40/60/80*/ 100/120Hz	Select according to the low frequency reproduction capabilities of the connected speaker.

- For "Speaker Configuration", the settings of each speaker sizes may be adjusted automatically
 corresponding to each setting. (e.g. If the "Front" is set to "Small", the "Subwoofer" will automatically
 set to "On" and also you cannot set "Center", "Surround", and "Surround Back", to "Large".)
- If you connect to 5.1-channel surround system, set "Surround Back" in "Speaker Configuration" to "None".



Menu	Setting items	Options	Descriptions
Channel Level Tests or sets the volume for each speakers.	Test Tone: "Test Tone" is the test tone which can be out put from the speakers so that you can adjust the volume for each speaker.	Off* Manual Auto	Select "Off" to deactivate the "Test Tone" feature. Select "Manual", then press [ENTER] to manually set the volume for the desired speaker. Select "Auto", then press [ENTER] to automatically out put the test tone from each speakers.
	Front Lch	0 dB to -12 dB (0 dB*)	If you have selected "Manual" in "Test Tone",
	Center	0 dB to -12 dB (0 dB*)	select the desired speaker to set and adjust the volume for the selected
	Front Rch	0 dB to -12 dB (0 dB*)	speaker. If you have selected "Auto" in "Test Tone", test tone will be output automatically in order. Adjust the volume of the speaker that output the test tone.
	Surround Rch	0 dB to -12 dB (0 dB*)	
	Surround Back Rch	0 dB to -12 dB (0 dB*)	
	Surround Back Lch	0 dB to -12 dB (0 dB*)	
	Surround Lch	0 dB to -12 dB (0 dB*)	
	Subwoofer	0 dB to -12 dB (0 dB*)	
	SW + 10 dB (Not available for HDMI)	On/Off*	Set "On" to increases the volume level that is output from the subwoofer by 10 dB.

,	·unc	τιοη	Setu	P

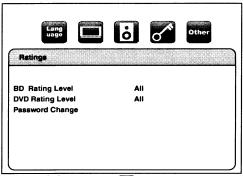
Menu	Setting items	Options	Descriptions
Delay Time This is a parameter for optimizing the	Distance	Feet*	Set the desired measure system. This measure system will be used for "Delay Time"
timing at which the sound is output from		Meters	setting. Press [ENTER] to switch the setting.
the speakers according to their	Front Lch	0ft - 60ft (12ft*) (0m-18m (3.6m*))	Select the distance from the listening point to the
distance from the listening position.	Front Rch	Oft - 60ft (12ft*) (0m-18m (3.6m*))	speaker to get the ideal delay time.
	Center	Oft - 60ft (12ft*) (0m-18m (3.6m*))	
	Surround Lch	Oft - 60ft (10ft*) (0m-18m (3.0m*))	
	Surround Rch	Oft - 60ft (10ft*) (0m-18m (3.0m*))	
	Surround Back Lch	Oft - 60ft (10ft*) (0m-18m (3.0m*))	
	Surround Back Rch	0ft - 60ft (10ft*) (0m-18m (3.0m*))	
	Subwoofer	Oft - 60ft (12ft*) (0m-18m (3.6m*))	
	Default		Select "Default", then press [ENTER], to reset the "Delay Time" setting to the default.

- Settings with (*) are the default.
- For HDMI, "None" and "Off" options for "Speaker Configuration" are not available.
 For "Delay Time", the difference among the value of the each speaker cannot exceed 15 ft (4.5m).

Function Setup



Ratings control allows you to set a limit, which prevents your children from viewing inappropriate materials. Playback will stop if the ratings exceed the levels you set, and it will require you to enter a password before the disc will play back.



- 1) Use $[\triangleleft / \triangleright]$ to select [, then press [ENTER].
- 2) Press [the Number buttons] to enter your 4-digit password.

For the first time use: Press [the Number buttons] enter any 4-digit number (except for 4737), then press [ENTER]. That number will be used as the password from the second time. Record your password in case you forget it.

- If you forgot the password, enter [4], [7], [3], [7]. The password will be cleared and rating level will be set to "All".
- While you input the password, press [CLEAR] to clear the number, then re-enter the password.

Proceed to A - C

A) BD Rating Level

- 1) Use $[\triangle / \nabla]$ to select "BD Rating Level", then press [ENTER].
- 2) Use $[\triangle / \nabla]$ to select your desired option, then press [ENTER].
 - "All" : To release the limitation.
 - "Age Setting": To set the age limitation.
 - After selecting "Age Setting", use [the Number buttons] to enter the age from 0 254, then
 press [ENTER].
 - (e.g. for age 15, press [0],[1],[5])
- 3) Press [SETUP] to exit.

B) DVD Rating Level

- 1) Use $[\triangle / \nabla]$ to select "DVD Rating Level", then press [ENTER].
- 2) Use $[\triangle / \nabla]$ to select a desired level, then press [ENTER].
- 3) Press [SETUP] to exit.

RATING EXPLANATIONS

• All : Parental control is inactive; all discs can play back.

• 8 [Adult] : DVD software of any grades (adult/general/children) can be played

back.

• 7 [NC-17] : No one under 17 admitted.

• 6 [R] : Restricted; under 17 requires accompanying parent or adult guardian.

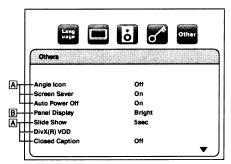
• 5 [PGR] : Parental guidance recommended.
• 4 [PG13] : Unsuitable for children under 13.
• 3 [PG] : Parental guidance suggested.

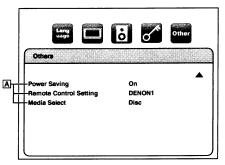
2 [G] : General audience.1 [Kid Safe] : Suitable for children.

C) Password Change

- 1) Use $[\triangle / \nabla]$ to select "Password Change", then press [ENTER].
- 2) Enter a new 4-digit password, then press [ENTER].
- 3) Press [SETUP] to exit.

Others





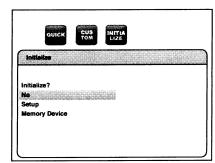
• For how to select the setting items and options, refer to "Custom" on page 29.

Setting items	Options
Angle Icon	On: The angle icon appears on the screen when playback the scene with various angle.
	Off*: The angle icon disappears on the screen.
Screen Saver	On*: If this unit is left with no activity for more than 5 minutes, the screen saver will be activated.
	Off: Sets off the screen saver.
Auto Power Off	On*: If this unit is left with no activity for more than 30 minutes, this unit turns off automatically.
	Off: Sets off the auto power off.
Panel Display Sets the brightness of the front	Bright*: Front panel display gets brighter.
panel display.	Dimmer: Front panel display gets darker.
	Auto: Front panel gets dark during playback.
Slide Show Sets the display time for the still	5sec*
picture (in JPEG format) playback	10sec
DivX(R) VOD Provides DivX [®] VOD registration code.	For more information about DivX [®] VOD visit www.divx.com/vod

Setting items	Options
Closed Caption Sets whether display the closed caption or not using the caption decoder (commercially available).	On Off*
Power Saving Lower the power consumption for standby mode by denying the command from RS-232C during standby mode.	On: Denies the command from RS-232C when the power is in standby mode. Off*: Accepts the command from RS-232C when the power is in standby mode.
Remote Control Setting Changes the signal code of a	DENON1*
remote control. (Refer to page 6)	DENON2
Media Select Select the media to playback.	Disc*: Select this when you play back a disc. SD Memory: Select this when you play back a SD Memory Card.

Militalize

Initialize the setting or SD Memory Card.



- 1) Press [SETUP] in stop mode.
- 2) Use $[\langle \rangle \rangle]$ to select "Initialize", then press [ENTER].
- 3) Use $[\triangle / \nabla]$ to select a desired option, then press [ENTER].

"No" :Exit without any initialization.

"Setup" :Reset the SETUP setting to the factory default.

"Memory Device" :Initialize the SD Memory Card.

- For "Setup" and "Memory Device", press [ENTER] after initialization is completed.
- 4) Press [SETUP] to exit.

Note

• The setting for "Ratings" will not be reset.

Others

Troubleshooting

If the unit does not perform properly when operated as instructed in this Operating Instruction, check the unit, consulting the following checklist.

Problem	Solution	Page
No power	 Check if the AC cord is properly connected. Unplug the AC cord once, and wait for 5-10 seconds and then plug it in again. 	-
No sound or picture	 Check if the connected display device is turned on. Check the HDMI connection. (Check the status of the HDMI related indications.) 	- 10
	 Check the RCA audio/video cable connections. Check if the pure direct mode is set to "Video Off" or "All Off". If it is the case, set it to "Display Off" or "Normal". 	10, 13 23
	 Check whether the connected display device or other device supports HDCP. (This unit will not output a video signal unless the other device supports HDCP.) 	12
	 Check whether the output format of this unit (HDMI FORMAT) matches the supported input format of other connected device. 	10,30,31
	 Check if the "HDMI Deep Color" is set to "Auto". If it is the case, set it to "Off". Check if the "I/P Direct" is set to "On". If it is the case, set it to "Off". 	31 31
Distorted picture	- Sometimes a small amount of picture distortion may appear. This is not a malfunction.	-
	 Connect this unit directly to the TV. If the RCA audio/video cables are connected to a VCR, pictures may be distorted due to the copy protection system. 	10
Completely distorted picture or black/white picture with BD/DVD	- Make sure the disc is compatible with this unit.	4
No sound or distorted sound	- Adjust the volume.	-
	- Check that the speakers are connected correctly.	10,12,13
	 Check the HDMI connections. Check the "Audio" settings. 	10 32,33
Picture freezes momentarily during playback	 Check the disc for fingerprints/scratches and clean with a soft cloth wiping from center to edge. 	4
	- Clean the disc.	4
Disc cannot be played back	Clean the disc.Ensure the disc label is facing up.	4 14
	- Check if the disc is defective by trying another disc.	-
	- Cancel the ratings control or change the control level.	36
	- Insert a correct disc that can be played back on this unit.	4
SD Memory Card cannot be read.	 The format of the card does not match to this unit or the card is not compatible. 	-
No return to start-up screen when disc is removed	- Reset this unit by turning it off, then on again.	-
The unit does not respond to the remote control	- Aim the remote control directly at infrared sensor window on the front of the unit.	6
	- Reduce the distance to infrared sensor window.	-
	 Replace the batteries in the remote control. Re-insert the batteries with their polarities (+/- signs) as indicated. 	6 6
	Make the signal code of the remote control match to the signal code of the unit.	6

Problem	Solution	Page
Buttons do not work or the unit stops responding	 To completely reset the unit, unplug the AC cord from the AC outlet for 5-10 seconds. 	_
The unit does not respond to some operating commands during playback	- Operations may not be permitted by the disc. Refer to the instructions of the disc.	14
The unit cannot read BD/DVD/CD	- Condensation ? (Let sit 1 or 2 hours)	3
	 You are attempting to play a disc other than one with one of the marks on page 4. 	4
	- Wipe the dirt off the disc or replace the disc.	4
Angle does not switch	 The angle cannot be switched for BD/DVD which do not contain multiple angles. In some cases multiple angles are only recorded for specific scenes. 	19
Playback does not start when the title is selected	- Check the "Ratings" setting.	36
The password for rating level has been forgotten	 Enter the default password "4737", then your forgotten password will be cleared. 	36

Note

- Some functions are not available in specific modes, but this is not a malfunction. Read the description in this Operating Instructions for details on correct operations.

 Some functions are prohibited on some discs.

Others Others

Language Code

Language	Code
A-B	
Abkhazian	4748
Afar	4747
Afrikaans	4752
Albanian	6563
Amharic	4759
Arabic	4764
Armenian	5471
Assamese	4765
Aymara	4771
Azerbaijani	4772
Bashkir	4847
Basque	5167
Bengali;Bangla	4860
Bhutani	5072
Bihari	4854
Bislama	4855
Breton	4864
Bulgarian [BUL]	4853
Burmese	5971
Byelorussian	4851
C-E	
Cambodian	5759
Catalan	4947
Chinese [CHI]	7254
Corsican	4961
Croatian	5464
Czech [CZE]	4965
Danish [DAN]	5047
Dutch [DUT]	6058
English [ENG]	5160

Language	Code
Esperanto	5161
Estonian	5166
F-H	
Faroese	5261
Fiji	5256
Finnish [FIN]	5255
French [FRE]	5264
Frisian	5271
Galician	5358
Georgian	5747
German [GER]	5051
Greek [GRE]	5158
Greenlandic	5758
Guarani	5360
Gujarati	5367
Hausa	5447
Hebrew	5569
Hindi	5455
Hungarian [HUN]	5467
I-K	
Icelandic [ICE]	5565
Indonesian	5560
Interlingua	5547
Interlingue	5551
Inupiak	5557
Irish [IRI]	5347
Italian [ITA]	5566
Japanese [JPN]	5647
Javanese	5669
Kannada	5760
Kashmiri	5765
Kazakh	5757

Language	Code
Kinyarwanda	6469
Kirghiz	5771
Kirundi	6460
Korean [KOR]	5761
Kurdish	5767
L-N	
Laothian	5861
Latin	5847
Latvian;Lettish	5868
Lingala	5860
Lithuanian	5866
Macedonian	5957
Malagasy	5953
Malay	5965
Malayalam	5958
Maltese	5966
Maori	5955
Marathi	5964
Moldavian	5961
Mongolian	5960
Nauru	6047
Nepali	6051
Norwegian [NOR]	6061
O-R	
Occitan	6149
Oriya	6164
Oromo(Afan)	6159
Panjabi	6247
Pashto;Pushto	6265
Persian	5247
Polish [POL]	6258
Portuguese [POR]	6266

Language	Code
Quechua	6367
Rhaeto-Romance	6459
Romanian [RUM]	6461
Russian [RUS]	6467
S	
Samoan	6559
Sangho	6553
Sanskrit	6547
Scots Gaelic	5350
Serbian	6564
Serbo-Croatian	6554
Sesotho	6566
Setswana	6660
Shona	6560
Sindhi	6550
Singhalese	6555
Siswat	6565
Slovak [SLO]	6557
Slovenian	6558
Somali	6561
Spanish [SPA]	5165
Sundanese	6567
Swahili	6569
Swedish [SWE]	6568
T	
Tagalog	6658
Tajik	6653
Tamil	6647
Tatar	6666
Telugu	6651
Thai	6654
Tibetan	4861

Language	Code
Tigrinya	6655
Tonga	6661
Tsonga	6665
Turkish [TUR]	6664
Turkmen	6657
Twi	6669
U-Z	
Ukrainian	6757
Urdu	6764
Uzbek	6772
Vietnamese	6855
Volapuk	6861
Welsh	4971
Wolof	6961
Xhosa	7054
Yiddish	5655
Yoruba	7161
Zulu	7267

Note

 If you choose a language that has a 3-letter-language code (written in bracket), the code will be displayed every time you change the audio or subtitle language setting on page 22. If you choose any other languages, '---' will be displayed instead. Others

Specifications

SIGNAL SYSTEM

NTSC color

APPLICABLE DISCS

(1) BD/DVD-video Discs

1-layer 12cm single-sided discs, 2-layer 12cm single-sided discs, 2-layer 12cm double-sided discs (1 layer per side)

1-layer 8cm single-sided discs, 2-layer 8cm single-sided discs, 2-layer 8cm double-sided discs (1 layer per side)

(2) BD-RE / BD-R (Recorded in BDMV format)

1-layer 12cm single-sided discs, 2-layer 12cm single-sided discs 1-layer 8cm single-sided discs, 2-layer 8cm single-sided discs

(3) DVD-R

1-layer 12cm single-sided discs, 2-layer 12cm single-sided discs 1-layer 8cm single-sided discs, 2-layer 8cm single-sided discs

(4) DVD-RW

1-layer 12cm single-sided discs 1-layer 8cm single-sided discs

(5) Compact discs (audio CD) 12cm discs, 8cm discs

(6) CD-RW/-R

12cm discs, 8cm discs

APPLICABLE MEMORY CARDS

(1) SD Memory Card

(2) SDHC Memory Card

(3) miniSD Card

(4) microSD Card

S-VIDEO OUTPUT

Y output level: 1Vp-p (75Ω/ohms)

C output level: 0.286Vp-p

Output connectors: S connector, 1 set

VIDEO OUTPUT

Y output level: 1Vp-p ($75\Omega/ohms$) Output connectors: Pin jack, 1 set

COMPONENT OUTPUT

Y output level: 1Vp-p (75 Ω /ohms)

PB/CB output level: 0.648Vp-p (75 Ω /ohms) PR/CR output level: 0.648Vp-p (75 Ω /ohms)

Output connectors: BNC jacks, 1 set/Pin jacks, 1 set

HDMI OUTPUT

Output jack: 19-pin HDMI terminal, 1 set

HDMI ver. 1.3b (Deep Color, Dolby Digital Plus, Dolby TrueHD, DTS-HD)

ANALOG AUDIO OUTPUT

Output level: 2Vrms

2 channel (L, R) output connector: Pin jacks,

Multi channel (FL, FR, C, SL, SR, SBL, SBR, SW): Pin jacks, 1set

AUDIO OUTPUT PROPERTIES

(1) Frequency response

1 BDs (linear PCM) : 4Hz to 22kHz (48kHz sampling)

: 4Hz to 44kHz (96kHz sampling)

: 4Hz to 88kHz (192kHz sampling)

2 DVDs (linear PCM) : 4Hz to 22kHz (48kHz sampling)

: 4Hz to 44kHz (96kHz sampling)

3 CDs : 4Hz to 20kHz

(2) S/N ratio : 125dB

(3) Total harmonic distortion: 1kHz 0.0008%

(4) Dynamic range : 110dB

DIGITAL AUDIO OUTPUT

Optical digital output: Optical connector, 1 set Coaxial digital output: Pin jack, 1 set

POWER SUPPLY

AC 120V, 60Hz

POWER CONSUMPTION

68W (Standby: 0.8W)

MAXIMUM EXTERNAL DIMENSIONS

W:434mm (17-2/16")

H:139mm (5-8/16")

D :399mm (15-12/16")

(including protruding parts)

MASS

10.3 kg (22.8 lbs)

REMOTE CONTROL

RC-1090

Infrared pulse type

Supply: DC 3V, 2 R6P/AA batteries

External dimensions:

W:52mm (2-1/16")

H :227mm (8-15/16")

D :30mm (1-3/16")

Mass: 171g (0.4 lbs) (included batteries)

For purposes of improvement, specifications and design are subject to change without notice.

BLU-RAY DISC / DVD VIDEO PLAYER DVD-3800BDCI

Addendum Sheet / Addenda / Apéndice

ENGLISH

Thank you for purchasing DENON's product. When you operate the unit, please read the operating instruction and this sheet.

Correction

page 11: Audio Setting

<Wrona>

Disc type	Audio recording	"HDMI Audio Out" setting		
	format	HDMI Multi(Normal)	HDMI Multi(LPCM)	HDMI 2ch
BD-RE/BD-R	AAC	Multi LPCM	Multi LPCM	2ch Downmix LPCM

<Correct>

BD-RE/BD-R AAC	AAC	Multi LPCM	2ch Downmix LPCM

page 12: Digital Connection to an AV Amplifier with Built-in Decoder

<Wrong>

Disc type	Audio recording format	"Digital Out" setting		
		Bitstream	LPCM	
BD-RE/BD-R	AAC	2ch Downmix LPCM	2ch Downmix LPCM	

<Correct>

BD-RE/BD-R AAC	AAC	2ch Downmix LPCM
----------------	-----	------------------

<Wrong>



^{*1} When "BD Audio Mode" is set to "Mix Audio Output", "HDMI Audio Out" is set to "Audio Mute" and "Digital Out" is set to "Bitstream", those audio will be output as Dolby Digital.

<Correct>

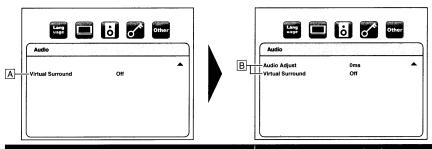
- *1 For the BD title with secondary or interactive audio, these audio will be output as Dolby Digital when all the conditions listed below are met:
 - · When "BD Audio Mode" is set to "Mix Audio Output".
 - · When "HDMI Audio Out" is set to "Audio Mute".
 - · When "Digital Out" is set to "Bitstream".

If the BD title does not have secondary or interactive audio, the audio will be output as shown in the table.

Additional Information

☐ page 32, 33: ☐ 6 Audio





Setting Items	Options
	Oms to 200ms(Oms*) The audio signal will be delayed for the amount of time you set.

FRANÇAIS

Merci d'avoir acheté un produit DENON.

Avant d'utiliser cet appareil, lisez attentivement le mode d'emploi et le présent addenda.

Correction

page 11: Paramètres Audio

<Incorrect>

Type de	Format	Paramètre "Sortie Audio HDMI"		
disque	d'enregistrement audio	Multi HDMl (Normal)	Multi HDMI (LPCM)	HDMI 2ch
BD-RE/BD-R	AAC	Multi LPCM	Multi LPCM	2ch Réduit LPCM

<Correct>

BD-RE/BD-R AAC AAC Multi LPCM	2ch Réduit LPCM
-------------------------------	-----------------

page 12: Connexion numérique à un amplificateur AV avec un Décodeur Intégré

<Incorrect>

Type de disque	Format d'enregistrement	Paramètre "Sor	rtie numérique"	
audio	Train Binaire	LPCM		
BD-RE/BD-R	AAC	2ch Réduit LPCM	2ch Réduit LPCM	

<Correct>

BD-RE/BD-R AAC	AAC	2ch Réduit LPCM

<Incorrect>

*1 Quand "Mode Audio BD" est réglé sur "Sortie Audio Mixte", "Sortie Audio HDMI" est sur "Sourdine" et "Sortie numérique" est sur "Train Binaire", ces signaux audio seront reproduits comme Dolby Digital.

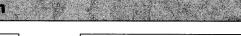
<Correct>

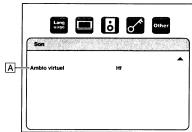
- *1 Pour le titre BD avec audio secondaire ou interactif, le son sera émis en Dolby Digital lorsque toutes les conditions suivantes sont réunies :
 - · Lorsque "Mode Audio BD" est réglé sur "Sortie Audio Mixte".
 - · Lorsque "Sortie Audio HDMI" est réglé sur "Sourdine".
 - · Lorsque "Sortie numérique" est réglé sur "Train Binaire".

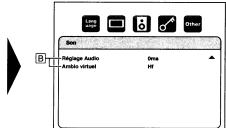
Si le titre BD n'a pas d'audio secondaire ou interactif, le son sera émis tel qu'indiqué dans le tableau.

Renseignements supplémentaires

☐ page 32, 33: ☐ 6 Son







Paramètres	Options
Règle la durée du retard entre le signal d'image	0 ms à 200 ms (Oms*) Le signal audio est retardé de la durée à mesure que vous avez réglé.

ESPAÑOL

Gracias por adquirir el producto de DENON.

Cuando use la unidad, lea las instrucciones de funcionamiento y esta hoja.

Corrección

página 11: Configuración de Sonido

<incorrecto>

Tipo de	Formato de	Configuración de "Salida audio HDMI"		
discos	grabación de sonido	Mult. HDMI (Normal)	Mult. HDMI (LPCM)	HDMI 2ch
BD-RE/BD-R	AAC	Mult. LPCM	Mult. LPCM	LPCM Downmix de 2 canales

<Correcto>

BD-RE/BD-R AAC	AAC	Mult. LPCM	LPCM Downmix de 2 canales

🖙 página 12: Conexión Digital a un Amplificador AV con Descodificador Integrado

<Incorrecto>

Tipo de discos	Formato de	Configuración de "Salida digital"			
	grabación de sonido	Bitstream	LPCM -		
BD-RE/BD-R	AAC	LPCM Downmix de 2 canales	LPCM Downmix de 2 canales		

<Correcto>

AAC AAC LPCM DOWNMIX de 2 canales	BD-RE/BD-R AAC	AAC	LPCM Downmix de 2 canales
-----------------------------------	----------------	-----	---------------------------

<lncorrecto>

*1 Cuando el "Modo de audio BD" está configurado a "Salida audio comb.", "Salida audio HDMI" está configurado a "Audio desactivado" y "Salida digital" está configurado a "Bitstream", esos sonidos se darán como salida como Dolby Digital.

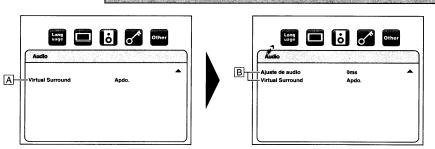
<Correcto>

- *1 Para el título BD con audio secundario o interactivo, este audio saldrá como Dolby Digital cuando se cumplan todas las condiciones enumeradas más abajo:
- · Cuando "Modo de audio BD" se ponga en "Salida audio comb.".
- · Cuando "Salida audio HDMI" se ponga en "Audio desactivado".
- · Cuando "Salida digital" se ponga en "Bitstream".

Si el título BD no tiene audio secundario o interactivo, el audio saldrá como se muestra en la tabla.

Información adicional

r página 32, 33: ■ 6 Audio



Opciones de configuración	Opciones
Ajuste de audio	0 ms a 200 ms(0 ms*)
Establece el tiempo de retardo entre la señal de	La señal de audio se retrasará el tiempo que
vídeo y la señal de audio.	usted establezca.

DENON SERVICE NETWORK / 服務網絡

- Please consult the outlet where the equipment was purchased.
- Bitte wenden Sie sich an den Händler, bei dem Sie das Produkt gekaufthaben.
- SVP veuillez consulter votre revendeur.
- Neemt u alstublieft contact op met het verkooppuntwaar u de apparatuur heeft gekocht.
- Por favor consulte en el establecimiento donde compró el equipo.
- Vänligen ta kontakt med butiken där du köpt utrustningen.
- Rivolgetevi al rivenditore che vi ha venduto l'apparecchio.
- Contacte a loja onde comprou o equipamento.
- 請向你購入本機的商號查詢。

请向你所购买本机的商行查询

Audio Products Group Pty Ltd. 67 O'Riordan Street Alexandria NSW 2015, PO Box 150, Mascot NSW 1460 Australia Australia

Tel: 1300 134 400 Fax: +61 2 9578 0159

Digital-Professional-Audio Vertriebsges.m.b.H., Seeböckgasse 59, A-1160 Wien Tel: 01-480-1006 Fax: 01-485-7679 Austria Transtel-Sabima P.V.B.A. Duboisstraat 48, B-2060 Antwerpen, Belgium Tel: 03-237-3607 **Belgium**

Canada

China

Czech republic

Denmark

Transtel-Sabima P.V.B.A. Duboisstraat 48, B-2060 Antwerpen, Belgium Tel: 03-237-3607 D&M CANADA INC. 5-505 Apple Creek Blvd., Markham, Ontario, L3R 5B1 Tel: 905-475-4085 Fax: 905-475-4159 电音数码音响贸易(上海)有限公司 上海市淮海中路887号永新大厦6010室 电话:(021)64372299 传真:(021)64339973 邮编: 200020 天龙客户服务热线: 021-62949285 EUROSTAR OSTRAVA s.r.o. areal Vodni stavby Praha, budova A2 Dobronicka 635,148 00 Praha 4 Czech Rep. Tel: 261-112-901 Fax: 261-112-904 Hifi Klubben A/S Dali Alle 1, 9610 Noerager, Denmark Tel: 45-96 72 10 00 Fax: 45-96 72 10 14 Soundata Oy Hameentie 157 5th floor 00560 Helsinki Finland Tel: +358-(0)9-4769 3300 Fax: +358-(0)9-4769 3310 DENON FRANCE A division of D&M France SAS Tour Ventose, 2 rue des Bourets, 92156 Suresnes Cedex, France Tel:+33(0)1-41-383230 Fax: +33(0)1-41-380110 DENON DEUTSCHLAND A division of D&M Germany GmbH An der Landwehr 19, D-41334 Nettetal, Germany Tel: +49(0)2157-1208-0 Fax: +49(0)2157-1208-10 **Finland** France

Germany

DENON DEUTSCHLAND A division of D&M Germany GmbH An der Landwehr 19, D-41334 Nettetal, Germany Tel: +49(0)2157-1208-0 Fax: +49(0)2157-1208-10
KINOTECHNIKI LTD. 14, PYRGOU STR. 166 75, GLYFADA ATHENS Tel: +30 210 960 1071 Fax: +30 210 960 1072
D&M Sales and Marketing (H.K.) Ltd. Unit 501, Ocean Centre, Harbour City, 5 Canton Road, Tsimshatsui, Kowloon, Hong Kong Tel: 852-2516-5864 Fax: 852-2516-5940
香港九龍尖沙咀廣東道5號海港城海洋中心5樓501室 電話: 852-2516-5864 傳真: 852-2516-5940
A.I.D.A. Audio Kft. 1112 Budapest Olt u. 37. Hungary Tel: 01-248-2030 Fax: 01-248-2039
Einar Farestveit & co hf., Borgartun 28, P.Box 5440, 125 Reykjavík. Tel: +354 5207900 Fax: +354 5207910
Pro FX Dynamic House 64 Church Street Bangalore-560 001 India Tel: +91-80-5768-6722 Fax: +91-80-2559-4298 Greece **Hong Kong**

Hungary

Iceland India

Indonesia Israel

Entar Farestvett & co frt., Borgartun 28, P.Box 5440, 125 Reykjavik. 1el: +354 520/900 Fax: +354 520/910 Fax: +354 520/9 Italy Korea

Malaysia

Tel: 02-715-9041 Fax: 02-715-9040
Wo Kee Hong Trading Sdn Bhd. 2nd Floor, (Left Wing), Bangunan Infinite Centre, Lot 1, Jalan 13/6, 46200 Petaling Jaya, Selangor Darul Ehsan, Malaysia Tel: 03-7954-8088 Fax: 03-7954-7088
Labrador, S.A. de C.V. Callejon del Naranjo 35, Naucalpan, 53560, Edo. Mex., Mexico Tel: 52-5359-5161 Fax: 52-5357-1775
Penhold B.V. Poppenbouwing 58, NL-4191 NZ Geldermalsen, Netherland Tel: 31-345-588 080 Fax: 31-345-588 085
Avalon Pacific Marketing Limited. 15c Vestey Drive, Mt Wellington, Auckland, New Zealand.
PO Box 11 631 Ellerslie, Auckland, New Zealand Tel: +64-9-573-5933 Fax: +64-9-573-3720
Hi-Fi Klubben Marcus Thranes gate 4-6, 0473 Oslo, Norway Tel: +47 22 80 63 10 Fax: +47 22 80 63 29
Lotteworld Audio Video Systems Incorporated CET Building Mezzannine Floor No. 4 Mindanao Avenue, Barangay Bahay Toro, Project 8, Quezon City, Philippines. Tel: +632-929-5334 Fax: +632-929-1343
HORN DISTRIBUTION S.A. Ulica Kurantow 34, 02-873 Warszawa Poland Tel: +48 22 331 55 33 Fax: +48 22 331 55 00
Videoacustica Qta. Do Paizinho-Armazém 5-Estrada De Circunvalação-Apart. 3127 1303 Lisboa Codex
Tel: +351 214241770 Fax: +351 214188093 Mexico Netherlands **New Zealand**

Norway **Philippines**

Poland

Portugal

Tel: +351 214241770 Fax: +351 214188093 ALL (E&E) Service Center Pte Ltd. Machtech Industrial Building, #06-04, No.2, Kallang Pudding Road, Singapore 349307 Singapore Tel: 6747-8274 Fax: 6748-9007

Slovakia BIS AUDIO s.r.o. Dobronivská cesta 1642/6 960 01 Zvolen Tel:045-5400 703 Fax:045-5400 704

South Africa Mandarin Distributors S.A. 10 Thora Crescent, Wynberg Ext.3 Sandton, P.O.Box 5137, Johannesburg Republic of South

Africa Tel: 27-11-444-8445 Fax: 27-11-444-8363

Gaplasa S.A.AV. Ing. Conde de Torroja, 25, 28022 Madrid Tel: 91-746-00-45 Fax: 91-329-44-57 **Spain** Hi-Fi Klubben Göteborg Skänegatan 25, 41252 Göteborg Tel:031 33 51010 Fax:031 33 51019 KOENIG APPARATE AG, Abteilung Elektronik. Eggbühlstrasse 28, CH-8052 Zürich, Switzerland Sweden **Switzerland**

Tel: 01-306-1626 Fax: 01-306-1690

Thailand

Ukraine

Taiwan R.O.C.

Tel: 01-306-1626 Fax: 01-306-1626 Fax:

Trialinia. 1010 Tel: . 00-22-30-0020 Tal: . 00-22-30-1030 Tel: . 490(212)293-0501 Tel: . 490(212)293-9515 Fax: . +90(212)249-3512 V.V. & SONS L.L.C. Street No-11/B, Road NO-128, Shed No-39 Al Khabisi, Deira, Dubai, U.A.E Tel: . +971-4-266-2435, 268-4575 Fax: . +971-4-266-2052 Mirs Ltd. Osipova str. 37/Office 1, 65012 Odessa, Ukraine Tel: . 4290 (492) 205555 Turkey

U.A.E.

Tel: +380 (482) 305530 Fax: +380 (482) 305555
DENON UK A division of D&M Audiovisual Ltd. Moorbridge House, Padbury Oaks, 579 Bath Road, Longford, Middlesex, UB7 0EH, United Kingdom Tel: +44(0)1753-680568 Fax: +44(0)1753-689697
DENON ELECTRONICS (USA), LLC (a D&M Holdings Company)
100 Corporate Drive, Mahwah, NJ 07430-2041 Tel: 800-497-8921 Fax: 888-544-8434
Anh Duy Manufacturing — Trading Co., Ltd. 170 Ung Van Kheim St., Ward 25, Blinh Thanh Dist., HCMC, Vietnam United

Kingdom & Eire U.S.A.

Vietnam

Tel: +84 8 898 3424 Fax: +84 8 898 3425

- If there is no service center in your local area, please contact one of our overseas service centers, listed above, for follow-up service consultation.

 Ist kein Service-Center in Ihrer Nähe, setzen Sie sich bitte miteinem der hier aufgelisteten Adressen in Verbindung.

 Si il n'y a pas destation technique proche de chez vous, veuillez contacter nos l' un de noscentres techniques, listés ci dessous, pour toutes demandes techniques.
- Als er geen servicecenter bij uin de buurt is, neem dan contact op een een van onze bovengenoemdeservicecenters voor ondersteuning.
- Si no hay un servicio técnico en su zona, por favor contacte con uno de los servicios técnicos centrales, indicados abajo, para realizar un seguimiento de su consult. Om det inte finns nagon auktoriserad Denon-verkstad där du bor, kontakta en av våra internationella servicecentra (se ovan). Se non ci sono dei centri assistenza autorizzati nella vostra zona, potete fare riferimento agli altri centri assistenza autorizzati, vedi elenco sopra, per qualsiasi
- consultazione tecnica.
- Caso não exista um centro de assistência técnica na sua área, consulte um dos centros acima apresentados 如若當地並無服務中心,請據上表所列本公司海外服務中心查詢售後服務事宜。 若当地无服务中心,请联系上述所列我们的海外服务中心,以便跟踪服务咨询。





PAGE

USA (ENGLISH) 2
CANADA (ENGLISH) 3
CANADA (FRENCH) 4

USA

DENON ELECTRONICS (USA), LLC

(a D&M Holdings Company)

100 Corporate Drive Mahwah, NJ 07430-2041 (800) 497-8921 (888) 544-8434 Fax

DENON REGIONAL SUPER SERVICE CENTERS (Repair only-No parts orders please)

PYRAMID AUDIO

305 E. Braker Lane Austin, TX 78753-2746 (512) 458-8292 (512) 453-4542 Fax

INNER SOUND

1416 S.E. Morrison Street Portland, OR 97214-2646 (503) 238-1955 (503) 238-1787 Fax

SERVICE WIDE TECHNOLOGIES

2239 Curtiss Street Downers Grove, IL 60515-4010 (630) 969-7333 (630) 969-7330 Fax

UNITED RADIO SERVICE

5717 Enterprise Parkway E. Syracuse, NY 13057-2905 (800) 634-8606 (315) 446-8505 Fax

NORMAN'S ELECTRONICS

3653 Clairmont Road Atlanta, GA 30341-4907 (770) 451-5057 (770) 455-8337 Fax

ELECTRONICE EXPRESS

1809 E. Fabyan Parkway West Chicago, IL 60185 (630) 208-4600 (630) 208-4601 Fax

AUDIO SERVICES

544 Central Dr., Suite 101 Virginia Beach, VA 23454-5245 (757) 498-8277 (757) 498-9554 Fax

GOLD CROWN ELECTRONICS

Victoria Business Park 129 E. Savarona Way Carson, CA 90746-1406 (310) 538-8282 (310) 538-8281 Fax

CANADA

D&M CANADA INC.

5-505 Apple Creek Boulevard Markham Ontario, L3R 5B1 (905) 475-4085 (905) 475-4159 Fax This warranty will be honored only in the U.S.A



Length of Non-Transferable Warranty

This warranty on your DENON product which is distributed and warranted by DENON ELECTRONICS (USA), LLC remains in effect for the following periods from the date of the original consumer purchase from an AUTHORIZED DENON ELECTRONICS (USA), LLC DEALER.

Product Category

A / V Controller, A / V Receiver, AM / FM Receiver		M / FM Receiver	AVC, AVR, DRA	2	
DVD Receiver, DVD Home Theater System		er System	ADV, S	1	
Digital Surround Decoder			AVD	3	
Pre-Amplifier, Digital Pre-Amplifier Power-Amplifier, Head Amplifier		r	PRA, AVP, DAP, POA, HA	3	
Tuner, Integrated Amplifier			TU, PMA	3	
CD Player, DVD Player			DCD, DCM, DP, DA, DVD, DVM	1]
Tape Recorder, CD Recorder, MD Recorder		Recorder	DRM, DRR, DRS, DRW, CDR, CDRW, DMD	1	
System Audio			D (UPA, UTU, UDCM, UDR, USC, USR, UCD, UDRA) D-A, D-F, D-G, D-M, CDR-M, DRR-M, S	1	YEAR(S)
Turntable	1	Autolift / Manual	DP-L, DP-M	4	
Turritable	2 Full Automatic		DP-F	2	
Speaker	Speaker		SC	1	
Sub-woofer			DSW	2	
Network Multimedia Server	1	Excluded Hard Disk Drive Unit	NS	3	
/ Client (Hard Disc Only)	2	Hard Disk Drive Unit	-	1	1
Microphone			DM-S	2	
Control Dock for iPod®		-	ASD	1	
Headphone			AH-D, AH-C	1	
Cartridge D			DL	90	DAYS
Remote Controller			RC	90	DATS

iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries

What is Covered

Except as specified below, this Warranty covers all defects in material and workmanship in this product occurring during the above warranty periods. The following are not covered by the Warranty: (1) Any product which is not distributed in the U.S.A. by DENON ELECTRONICS (USA), LLC. (2) Any product which is not purchased in the U.S.A. from an authorized DENON dealer, unless the product is purchased through the U.S.A. Military Exchange Service where the Warranty will be One (1) year for all products listed above except in the case of Cartridges, Accessories, Remote Controller and Headphone which will remain at 90 days. (Note: AUTHORIZED DENON DEALERS can be identified by DENON AUTHORIZED DEALER sticker displayed in the stores. If you are uncertain as to whether a dealer is a DENON AUTHORIZED DEALER, please contact DENON as listed below). (3) Any product on which the serial number has been defaced, modified or removed. (4) Damaged deterioration or malfunction resulting from: a) Accident, act of nature, abuse, misuse, neglect, unauthorized product repair, opening of or modification or failure to follow instructions supplied with the product. b) Repair or attempted repair by anyone not authorized by DENON. c) Any shipment of the product (claim must be presented to carrier). (5) Items subject to wear from normal usage (tape heads, cartridges, stylus, battery, etc.). (6) Periodic check-ups which do not disclose any defect. (7) Use of the product outside the U.S.A. (8) Damaged magnetic tape or CD/DVD discs. (9) Use in industrial, commercial, and/or professional applications. (10) Any installation or removal charges resulting from product failure.

What We Will Pay For

If during the applicable warranty period from the date of original consumer purchase your DENON product is found to be defective by DENON, DENON will repair, or at its option, replace with new, used or equivalent model, such defective product without charge for parts or labor.

How to Obtain Warranty Performance

If your unit ever needs service, it may be taken or shipped to any authorized DENON service station or DENON ELECTRONICS (if you are uncertain as to whether a service station is DENON authorized, please contact DENON as listed below.) In all other cases, the following procedures apply whenever your unit must be transported for warranty service:

- a. You are responsible for transporting your unit or arranging for its transportation.
- b. If shipment of your unit is required;
 - You must pay the initial shipping charges, but we will pay the return shipping charges if the repairs are covered by the Warranty.
- E. WHEN RETURNING YOUR UNIT FOR WARRANTY SERVICE, A COPY OF THE ORIGINAL SALES SLIP MUST BE ATTACHED.
- d. You should include the following: your name, address, daytime telephone number, model and serial number of the product and a description of the problem. In the case of a CD or DVD Player, please enclose ONE (1) disc that the unit has failed with for test reasons. It will be returned with the unit.

THIS WARRANTY IS VALID IN THE U.S.A. ONLY.

If your product does not require service, but you have questions regarding its operation, please contact our Technical Services Department as listed below.

THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

OUR LIABILITY IS LIMITED TO THE REPAIR OR REPLACEMENT, AT OUR OPTION, OF ANY DEFECTIVE PRODUCT AND SHALL IN NO EVENT INCLUDE INCIDENTAL OR CONSEQUENTIAL COMMERCIAL OR PROPERTY DAMAGES OF ANY KIND. WE ARE NOT RESPONSIBLE FOR PRODUCTS LOST, STOLEN AND/OR DAMAGED DURING SHIPPING.

SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, but you may also have other rights which vary from state to state. This Warranty may not be altered other than in a writing signed by an officer of Denon Electronics USA, LLC.

DENON ELECTRONICS (USA), LLC

(a D&M Holdings Company) 100 Corporate Drive Mahwah, NJ 07430-2041 (800) 497-8921 www.usa.denon.com This warranty will be honored only in Canada.

DENONLIMITED WARRANTY

Length of Non-Transferable Warranty

This warranty on your DENON product which is distributed and warranted by D&M CANADA INC. remains in effect for the following periods from the date of the original consumer purchase from an AUTHORIZED D&M CANADA INC. DEALER.

Product Category

Turntable	1	Autolift	DP-L	4	
Turntable	2	Full Automatic	DP-F	2	
Tuner, Integrated Amplifier		-	TU, PMA	3	
Pre-Amplifier, Digital Pre-Amplifier Power-Amplifier, Head Amplifier		r	PRA, AVP, DAP, POA, HA	3	
Digital Surround Decoder			AVD	3	
Network Multimedia	1	Excluded Hard Disk Drive Unit	NS	3	1
Server / Client	2	Hard Disk Drive Unit	-	1	
A / V Controller, A / V Receiver, AM / FM Receiver		M / FM Receiver	AVC, AVR, DRA	2	1
DVD Receiver, DVD Home	e Theate	er System	ADV, S	1	VEARC
CD Player, DVD Player			DCD, DCM, DP, DA, DVD, DVM	1	YEARS
Tape Recorder, CD Recorder, MD Recorder		Recorder	DRM, DRR, DRS, DRW, CDR, CDRW, DMD, DTR	1	1
System Audio			D (UPA, UTU, UDCM, UDR, USC, USR, UCD, UDRA) D-M, D-A, D-G, CDR-M,DRR-M, S	1	
Speaker			SC	1	
Sub-woofer			DSW	2	
Karaoke System			DCG, HMA	1	
Microphone			DM-S	2	
Control Dock for iPod®			ASD	1	
Headphone			AH-D, AH-C	1	
Cartridge, Accessories DL, AU, DM-K, DME		DL, AU, DM-K, DME	90	DAVC	
Remote Controller			RC	90	DAYS

What is Covered

Except as specified below, this Warranty covers all defects in material and workmanship in this product occurring during the above warranty periods. The following are not covered by the Warranty: (1) Any product which is not distributed in Canada by D&M CANADA INC. (2) Any product which is not purchased in Canada from an authorized DENON dealer. (Note: AUTHORIZED DENON DEALERS can be identified by DENON AUTHORIZED DEALER sticker displayed in the stores. If you are uncertain as to whether a dealer is a DENON AUTHORIZED DEALER, please contact D&M CANADA INC. as listed below). (3) Any product on which the serial number has been defaced, modified or removed. (4) Damaged deterioration or malfunction resulting from: a) Accident, act of nature, abuse, misuse, neglect, unauthorized product repair, opening of or modification or failure to follow instructions supplied with the product. b) Repair or attempted repair by anyone not authorized by DENON. c) Any shipment of the product (claim must be presented to carrier). (5) Items subject to wear from normal usage (tape heads, cartridges, stylus, battery, etc.). (6) Periodic check-ups which do not disclose any defect. (7) Use of the product outside Canada. (8) Damaged magnetic tape or CD/DVD discs. (9) Use in industrial, commercial, and/or professional applications. (10) Any installation or removal charges resulting from product failure.

What We Will Pay For

If during the applicable warranty period from the date of original consumer purchase your DENON product is found to be defective by DENON, DENON will repair, or at its option, replace with new, used or equivalent model, such defective product without charge for parts or labor.

How to Obtain Warranty Performance

If your unit ever needs service, it may be taken or shipped to any authorized DENON service station or D&M CANADA INC. (if you are uncertain as to whether a service station is DENON authorized, please contact D&M CANADA INC. as listed below.) In all other cases, the following procedures apply whenever your unit must be transported for warranty service;

- a. You are responsible for transporting your unit or arranging for its transportation.
- b. If shipment of your unit is required;
- You must pay the initial shipping charges, but we will pay the return shipping charges if the repairs are covered by the Warranty.
- c. WHEN RETURNING YOUR UNIT FOR WARRANTY SERVICE, A COPY OF THE ORIGINAL SALES SLIP MUST BE ATTACHED.
- d. You should include the following: your name, address, daytime telephone number, model and serial number of the product and a description of the problem. In the case of a CD or DVD Player, please enclose ONE (1) disc that the unit has failed with for test reasons. It will be returned with the unit.

THIS WARRANTY IS VALID IN CANADA ONLY.

If your product does not require service, but you have questions regarding its operation, please contact our Technical Services Department as listed below.

THIS WARRANTY IS EXPRESSLY MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

OUR LIABILITY IS LIMITED TO THE REPAIR OR REPLACEMENT, AT OUR OPTION, OF ANY DEFECTIVE PRODUCT AND SHALL IN NO EVENT INCLUDE INCIDENTAL OR CONSEQUENTIAL COMMERCIAL OR PROPERTY DAMAGES OF ANY KIND. WE ARE NOT RESPONSIBLE FOR PRODUCTS LOST, STOLEN AND/OR DAMAGED DURING SHIPPING.

SOME PROVINCES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU.

This warranty gives you specific legal rights, but you may also have other rights which vary from province to province. This Warranty may not be altered other than in a writing signed by an officer of D&M Canada Inc.

D&M CANADA INC.

5-505 Apple Creek Boulevard Markham, Ontario L3R 5B1 (905) 475-4085 www.denon.ca Cette garantie ne sera honorée qu'au Canada.

DENONGARANTIE LIMITÉE

Durée du garantie non-transférable

La garantie de votre produit DENON, distribué et garanti par D&M CANADA INC. prend effet à partir de la date d'achat du consommateur original auprès d'un revendeur official D&M CANADA INC. pendant les périodes suivantes.

Catégorie de produit

	1	Levée auto	DP-L	4	
Table tournante	2	Auto complet	DP-F	2	
Syntoniseur, amplificateur intégré			TU, PMA	3	
Préamplificateur, préamplificateur numérique Amplificateur de puissance, Préamplificateur phono			PRA, AVP, DAP, POA, HA	3	
Décodeur surround numé	rique		AVD	3	
Serveur / Client de	1	Excluant le mécanisme du disque dur	NS	3	
réseau multimédia 2 Le mécanis		Le mécanisme du disque dur	-	1	
Contrôleur A / V, Récepter	ur A / V,	Récepteur AM / FM	AVC, AVR, DRA	2	
Récepteur DVD, Système	DVD H	ome Theater	ADV, S	1	ANNÉES
Lecteur CD, Lecteur DVD			DCD, DCM, DP, DA, DVD, DVM	1	AIVIVEES
Magnétocassette, Enregistreur CD, Enregistreur MD		D, Enregistreur MD	DRM, DRR, DRS, DRW, CDR, CDRW, DMD, DTR	1	
Système Audio			D (UPA, UTU, UDCM, UDR, USC, USR, UCD, UDRA) D-M, D-A, D-G, CDR-M,DRR-M, S	1	
Haut-parleurs			SC	1	
Sub-woofer			DSW	2	
Systèmes Karaoke			DCG, HMA	1	
Micro			DM-S	2	
Dock de contrôle pour iPod®			ASD	1	
Casque d'écoute			AH-D, AH-C	1	
Cellule phonolectrice, Accessoires		S	DL, AU, DM-K, DME	90	JOURS
Télécommande			RC	90	Jours

Apple et iPod sont des marques commerciales d'Apple Computer, Inc., déposées aux Etats-Unis et dans d'autres pays

Converture

Cette garantie couvre tous les défauts de matériel ou de fabrication du produit, à l'exception de ceux indiqués ci-après qui conforrment selon les termes durant la periode de la garantie. Ne sont pas couverts par la garantie: (1) Tout produit qui n'est pas distribué au Canada par D&M CANADA INC. (2) Tout produit qui n'a pas été acheté au Canada auprès d'un revendeur officiel DENON (Note: On peut identifier les revendeurs officiels DENON par leur auto-collant "REVENDEUR OFFICIEL DENON" affiché dans leur magasin. Si vous doutez qu'un revendeur soit officiellement reconnu, contactez D&M CANADA INC. à l'adresse ci-dessous.) (3) Tout produit dont le numéro de série a été effacé, modifié ou enlevé. (4) Dommages dus à la détérioration ou à un fonctionnement défectueux à la suite de: a) accident, acte de la nature, abus, utilisation impropre, négligence, réparation au moyen d'un produit non autorisé, debalé, modification, emploi contraire aux instructions fournies avec le produit, b) réparation ou tentative de réparation par quelqu'un non reconnu par DENON. c) tout envoi du produit (la réclamation doit être présentée au transporteur), (5) Articles sujets à détérioration par l'usage (têtes de magnétophone, cellules phono, pointes de lecture phono, piles, etc.). (6) Vérification périodique qui ne révèle aucun défaut. (7) Utilisation du produit nou de déplacement résultant d'un défaut du produit.

Notre paiement

Si votre produit DENON est reconnu défectueux par DENON durant la période d'application de la garantie après la date d'achat du consommateur, DENON réparera ou, à son choix, remplacera avec un modèle neuf, usagé ou équivalent ce produit défectueux sans frais de pièces ni de main d'œuvre.

Exécution de la garantie

Si votre produit nécessite service, il peut être envoyé à tout atelier de service officiel DENON ou chez D&M CANADA INC. (Si vous doutez que l'atelier de service soit officiellement reconnu, contactez D&M CANADA INC. à l'adresse ci-dessous). Dans tous les autres cas, les procédures suivantes s'appliquent si votre article doit être transporté pour un service sous garantie.

- Vous êtes responsable du transport de votre article ou vous devez vous arranger vous-même pour son transport.
- b. Si votre article doit être envoyé, vous devez payer les frais d'envoi initiaux, mais nous payerons les frais de retour si la garantie couvre les réparations.
- c. LORSQUE VOUS RENVOYEZ VOTRE ARTICLE POUR UN SERVICE SOUS GARANTIE, VOUS DEVEZ JOINDRE UNE COPIE DE LA FACTURE D'ACHAT D'ORIGINE.
- d. Vous devez inclure également vos nom, adresse, numéro de téléphone de jour, numéros de modèle et de série du produit et une description du problème.

 Dans le cas d'un lecteur CD ou DVD, joindre un disque que l'appareil n'a pu lire pour test. Il vous sera retourné avec l'article.

CETTE GARANTIE EST VALABLE SEULMENT AU CANADA.

Si votre produit ne requiert aucun service mais que vous avez des questions quant à son fonctionnement, contactez notre département technique dont l'adresse figure ci-dessous.

CETTE GARANTIE EST EXPRESSÉMENT FAITE EN LIEU ET PLACE DE TOUTES LES AUTRES GARANTIES EXPRIMÉES OU SOUS-ENTENDUES' Y COMPRIS, SANS SE LIMITER À CELLES-CI, LES GARANTIES MARCHANDES ET SPÉCIFIQUES POUR UN USAGE PARTICULIER.

NOTRE RESPONSABILITÉ SE LIMITE À LA RÉPARATION OU AU REMPLACEMENT, À NOTRE CHOIX, DE TOUT PRODUIT DÉFECTUEUX ET N'INCLUT EN AUCUN CAS DES DOMMAGES FORTUITS, COMMERCIAUX INDIRECTS NI MATÉRIELS D'AUCUNE SORTE. NOUS NOUS SOMMES PAS RESPONSABLES POUR LA PERTE DE LES PRODUITS ET/OU LES MARCHANDISES ENDOMMAGES PENDANT LE TRNASPORT DES BIENS.

CERTAINES PROVINCES NE PERMETTENT PAS DE LIMITES QUANT À LA DURÉE D'UNE GARANTIE SOUS-ENTENDUE ET/OU NE PERMETTENT PAS L'EXCLUSION DE DOMMAGES FORTUITS. LES LIMITATIONS ET EXCLUSIONS MENTIONNÉES PLUS HAUT PEUVENT NE PAS S'APPLIQUER À VOTRE CAS.

Cette garantie vous donne des droits légaux spécifiques, mais il se pourrait que vous ayez d'autres droits qui varient d'une province à l'autre. La garantie ne peut être modifiée que par un document signé par un gestionnaire autorisé de D&M Canada.

D&M CANADA INC.

5-505 Apple Creek Boulevard Markham, Ontario L3R 5B1 (905) 475-4085 www.denon.ca